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# Oceanic Observations of the Pacific

# OCEANIC OBSERVATIONS OF THE PACIFIC

# 1952

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OCEANIC OBSERVATIONS OF THE PACIFIC: 1952

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# Preface

Oceanic Observations of the Pacific is a medium for publication of oceanographic data collected in the Pacific Ocean and its adjacent seas by the cooperating agencies. At the present time these agencies are Scripps Institution of Oceanography of the University of California, San Diego, California; Biological Laboratory of the Bureau of Commercial Fisheries, Honolulu, Hawaii (formerly Pacific Oceanic Fishery Investigations); Biological Laboratory of the Bureau of Commercial Fisheries, La Jolla, California (formerly South Pacific Fishery Investigations); Biological Laboratory of the Bureau of Commercial Fisheries, Seattle, Washington (formerly Pacific Salmon Investigations); Department of Oceanography of the University of Washington, Seattle, Washington; Inter-American Tropical Tuna Commission, La Jolla, California; Pacific Oceanographic Group of the Fisheries Research Board of Canada, Nanaimo, British Columbia; United States Navy Electronics Laboratory, San Diego, California. Certain cruises were carried out jointly as California Cooperative Oceanic Fisheries Investigations (CCOFI). The agencies cooperating in the CCOFI program are the Scripps Institution, the Biological Laboratory of the Bureau of Commercial Fisheries, La Jolla, the California Department of Fish and Game, the Hopkins Marine Station and the California Academy of Sciences.

A grant from the National Science Foundation has supported part of the cost of preparing these data for publication and most of the printing cost.

The present volume contains observations made in 1952. For each oceanographic station, values of temperature, salinity and oxygen are tabulated at observed and at standard depths. Computed values of density, specific volume anomaly or thermosteric anomaly, and geopotential anomaly are also tabulated at standard depths. In addition, some observations of phosphate and silicate are included. The positions of serial observations and the numbers of bathythermograph observations made in 1952 and during the period 1941 through 1952 are shown on charts. Information concerning each cruise is summarized in a table.

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# Description of Observations

## SIGNIFICANCE OF REPORTED OCEANOGRAPHIC DATA

Routine field measurements of oceanographic parameters by conventional methods are usually subject to at least the following random errors:

| | |
|---|---|
| depth | ±4 m (in the upper 1000 m) |
| temperature | ±0.02°C |
| salinity | ±0.03‰ |
| oxygen | ±0.04 ml/L |
| phosphate | ±0.05 to 0.1 μg at/L |

A recent analysis of the precision of field measurements of temperature and salinity is that of Wooster and Taft (1958). It should be noted that the above estimate of salinity precision refers to analyses by Knudsen titration.

Interpolated values at standard depths are known with less precision, and the resulting uncertainty in specific volume anomaly and thermosteric anomaly at standard depths due to random errors in field measurements of temperature, salinity and depth is of the order of three centiliters per ton. Therefore, in this publication series it is the practice to report specific volume anomaly and thermosteric anomaly to no more than one part in $10^5$ (one cl/ton) and geopotential anomaly to no more than the nearest dynamic centimeter.

It should be noted also that computations of salinity (from measured chlorinity) and density (sigma-t, specific volume anomaly and thermosteric anomaly) reported in this volume have all been based on the empirical equations and tables by Knudsen (1901) and Ekman (1908). Because of the inadequacy of our present knowledge of the equation of state of sea water (Eckart, 1958) and the uncertainty of the relationship between chlorinity and salinity (Carritt and Carpenter, 1959), it is possible that these computed values differ systematically from the absolute values. However, in the upper thousand meters at least, Reid (1959) has shown that the influence of such systematic errors on the accuracy of computed geostrophic flow is significantly smaller than the influence of errors in the determination of temperature, salinity, pressure and position.

## NOTES ON PARTICULAR CRUISES

### California Cooperative Oceanic Fisheries Investigations

It has been found that on the first cruise of 1952 (CCOFI 5201) nearly all of the salinity data obtained by two ships are subject to substantial error. The water samples were stored with unsatisfactory seals for several months and evaporation occurred before titration. The extent of evaporation has been estimated by comparing the results of these two cruises with earlier and later data in the depth range of 500 to 1000 meters, and also a comparison was made of the 10-meter samples titrated immediately at the end of each cruise with the corresponding surface samples titrated much later. These comparisons show evaporation from nearly all samples. The mean of the resulting change of salinity was 0.043‰ for the RV Horizon data and 0.060‰ for the RV Crest data. However, evaporation was not uniform since depth-by-depth and station-by-station differences from the more dependable data varied somewhat. For the Horizon the standard deviation was 0.079‰ and for the Crest it was 0.014‰.

All salinity values of these two ships, except the 10-meter data, are marked "E," indicating that evaporation is known to have occurred.

On Cruises 5201 through 5210 salinity samples were titrated manually; on Cruise 5211 salinities were obtained by an automatic device which determined the end point by measuring the electrical potential. The random errors in the manual method are estimated to be about 0.025‰ (root mean square); those of the automatic device, about 0.050‰.

### Expedition Shellback

The purpose of Shellback and associated Expeditions Shuttle and Shortcut (Operation Co-op) was to obtain an extensive and systematic set of oceanographic observations from the eastern tropical Pacific. Prior to 1952 only a few observations were available from this area.

After return of the expedition it was discovered that the salinity bottles had not been adequately sealed. Analyses of the samples showed numerous abnormally high salinity values, indicating that evaporation had occurred. Because of the random nature of this evaporation and because a large percentage of the samples was affected, it was decided to discard all of the salinity values.

### Expedition Capricorn

Expedition Capricorn was the fourth of a series of oceanographic expeditions into the deep Pacific sponsored by the Navy Department and the University of California. Most of the work was done between the equator and the Tropic of Capricorn; hence the name, Capricorn. The principal aim of the expedition was to study the floor of the deep Pacific basin.

In addition to geological and geophysical exploration, certain biological, physical and meteorological observations were made because the sediment blanket is so closely interwoven with the life and movement of the water above the sea floor and, also, the movement of ocean water is affected by the atmosphere above the sea.

Cruises HMS-14, HMS-15, HMS-16 and HMS-17

No correction of depths for the four cruises of the RV Hugh M. Smith presented in this volume has been necessary since no error was made in the original computations at the time of processing. (An error reported by Thomas S. Austin, 1962, had been made in the calculation of later data of the RV Hugh M. Smith and RV Charles H. Gilbert reported in Special Scientific Reports, U. S. Fish and Wildlife Service, Fisheries Nos. 168, 180, 201, 217, 238, 252, 315, 358 and part of 164.)

Cruise NP-52-1

Interpolation for values at standard depths and determination of calculated depths were carried out by machine program at the U. S. Naval Oceanographic Office, Washington, D. C. Interpolations were made by the three-point Lagrange method (U. S. N. Hydrogr. Off., 1960; Nat. Oceanogr. Data Center, 1962).

Expedition Shuttle

The USS Marysville of the U. S. Navy Electronics Laboratory made observations in the eastern tropical Pacific on Expedition Shuttle as part of Operation Co-op. The final processing of the data was done by the Data Collecting and Processing Group of the Scripps Institution.

Cruises BB-1, BB-4, BB-7 and BB-9

Interpolation of values at standard depths was performed by the IBM Type 650 Magnetic-Drum Data-Processing Machine in the Research Computer Laboratory of the University of Washington, using the three-point Lagrange curve based upon one point above and two points below the desired depth. Corrections were made for any peculiar interpolations which resulted from use of this method in the upper layers.

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations 0-500 m | 500-1000 m | 1000-2000 m | >2000 m | Total | T and S obs at 10 m | No. of BT obs |
|---|---|---|---|---|---|---|---|---|---|
| CCOFI | | | | | | | | | |
| 5201 | Black Douglas[a] | 20-28 i | 9 | 11 | 18 | 0 | 38 | 0 | 163 |
| | Crest | 9-22 i | 43 | 2 | 5 | 0 | 50 | 0 | 92 |
| | Horizon | 16-19 i | 3 | 0 | 11 | 0 | 14 | 0 | 65 |
| 5202 | Black Douglas | 13-25 ii | 17 | 1 | 11 | 0 | 29 | 0 | 149[c] |
| | Crest | 6-15 ii | 12 | 2 | 22 | 0 | 36 | 0 | 181[c] |
| | Horizon | 6-21 ii | 19 | 6 | 26 | 0 | 51 | 0 | 188[c] |
| 5203 | Black Douglas | 24 iii-3 iv | 15 | 24 | 5 | 0 | 44 | 0 | 136[c] |
| | Crest | 7-16 iii | 17 | 6 | 23 | 0 | 46 | 0 | 125[c] |
| | E. W. Scripps | 20-29 iii | 21 | 20 | 0 | 0 | 41 | 0 | 57[c] |
| | Horizon | 5-17 iii | 26 | 14 | 7 | 0 | 47 | 0 | 171[c] |
| | Paolina-T | 5-6 iii | 0 | 2 | 0 | 0 | 2 | 0 | 24[c] |
| 5204 | Black Douglas | 5-22 iv | 19 | 31 | 5 | 0 | 55 | 0 | 248[c] |
| | Crest | 2-23 iv | 16 | 53 | 7 | 0 | 76 | 0 | 323[c] |
| | E. W. Scripps | 26-28 iv | 6 | 12 | 0 | 0 | 18 | 0 | 18[c] |
| | Horizon | 4-23 iv | 28 | 30 | 6 | 0 | 64 | 0 | 258[c] |
| 5205 | Black Douglas | 9-20 v | 8 | 17 | 7 | 0 | 32 | 0 | 42[e] |
| | E. W. Scripps | 14-17 v | 6 | 8 | 0 | 0 | 14 | 0 | 21[e] |
| | Paolina-T | 20-26 v | 9 | 12 | 2 | 0 | 23 | 0 | 72[e] |
| | Spencer F. Baird | 9-25 v | 26 | 28 | 10 | 0 | 64 | 0 | 154[e] |

| $PO_4$-P | Depth determination: Usual No. Nansen btls | No. P therms/btl | Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
|---|---|---|---|---|---|---|---|
| 0 | 15 | 2 | 9 | - | 34[b] | - | Marine mammal watch |
| 0 | 15 | 2 | 9 | - | 50[b] | - | Marine mammal watch |
| 0 | 15 | 2 | 9 | - | 15[b] | - | Marine mammal watch |
| 0 | 15 | 2 | 7 | - | 28[b] | - | 10-day sampling of spawning fish off Cedros Island for fecundity, availability and food studies and age and size determinations; marine life watch |
| 0 | 16 | 2 | 8 | - | 44[b] | 112 GEK | 10-day trajectory study to evaluate methods for measuring currents and to determine time variation in biol., chem. and phys. properties within a given water type; radiosonde obs; marine life watch |
| 0 | 15 | 2 | 9 | - | 48[b]<br>2[d] | - | Marine life watch |
| 0 | 15 | 2 | 6 | - | 64[b] | - | Marine life watch |
| 0 | 11 | 2 | 9 | - | 48[b] | - | Obs of gray whale in and near Scammon and San Ignacio Lagoons; marine life watch |
| 0 | 13 | 2 | 6 | - | 0 | 32 GEK | Anchor-sta and close-grid upwelling study off Pt. Conception; marine life watch |
| 0 | 15 | 2 | 9 | - | 46[b] | - | Marine life watch |
| 0 | 13 | 2 | 6 | Thermitow | 0 | 84 GEK | GEK and Thermitow obs between Pt. Conception and San Diego to study countercurrent and eddy system |
| 0 | 13-15 | 2 | 7 | - | 67[b] | - | 24 anchor stas and hourly BT obs during special close-grid survey off Baja Calif.; marine life watch |
| 0 | 13 | 2 | 6 | Thermitow | 57[b] | - | 6 anchor stas with Thermitow and hourly BT obs during special close-grid survey off Baja Calif.; radiosonde obs; marine life watch |
| 0 | 13 | 2 | 5 | - | 0 | - | Hydro. stas at 2-hr intervals to study upwelling |
| 0 | 13 | 2 | 6 | - | 37[b] | - | Special hydro. casts, vertical plankton hauls to 75 m, GEK and hourly BT obs while vessel followed drift buoy through close-grid area during special close-grid survey off Baja Calif.; marine life watch |
| 0 | 15 | 2 | 7 | - | 42[b] | - | Collection of sardine eggs and larvae to study spawning; marine life watch |
| 0 | 13-16 | 2 | 8 | - | 24[b] | - | Marine life watch |
| 0 | 13-16 | 2 | 9 | - | 30[b]<br>2[f] | - | Marine life watch |
| 0 | 13-16 | 2 | 8 | - | 92[b] | - | Microplankton hauls; marine life watch |

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations 0–500 m | 500–1000 m | 1000–2000 m | >2000 m | Total | T and S obs at 10 m | No. o BT ob |
|---|---|---|---|---|---|---|---|---|---|
| 5206 | Crest | 8–21 vi | 21 | 29 | 6 | 0 | 56 | 0 | 130[b] |
| | Spencer F. Baird | 6–18 vi | 18 | 18 | 8 | 0 | 44 | 0 | 93[b] |
| | Yellowfin | 3–14 vi | 13 | 34 | 0 | 0 | 47 | 0 | 114[b] |
| 5207 | Crest | 10–23 vii | 22 | 22 | 8 | 0 | 52 | 0 | 160[b] |
| | Paolina-T | 9–23 vii | 20 | 23 | 7 | 0 | 50 | 0 | 111[b] |
| | Spencer F. Baird | 2–12 vii | 13 | 32 | 6 | 0 | 51 | 0 | 132[b] |
| 5208 | Black Douglas | 8–19 viii | 17 | 18 | 6 | 0 | 41 | 0 | 119 |
| | Crest | 9–19 viii | 20 | 18 | 8 | 0 | 46 | 0 | 128 |
| | E. W. Scripps | 9–14 viii | 22 | 0 | 0 | 0 | 22 | 0 | 330 |
| | Spencer F. Baird | 12–17 viii | 26 | 0 | 0 | 0 | 26 | 0 | 99 |
| 5209 | Black Douglas | 22 ix–6 x | 25 | 0 | 0 | 0 | 25 | 50 | 221[b] |
| | Crest | 4–14 ix | 21 | 17 | 9 | 0 | 47 | 0 | 130[b] |
| | Paolina-T | 4–19 ix | 19 | 19 | 8 | 0 | 46 | 0 | 223[b] |
| 5210 | Crest | 8–22 x | 16 | 23 | 10 | 0 | 49 | 0 | 117[b] |
| | Paolina-T | 8–19 x | 20 | 16 | 6 | 0 | 42 | 0 | 187[b] |
| 5211 | Black Douglas | 8–21 xi | 14 | 23 | 7 | 0 | 44 | 0 | 164[b] |
| | Crest | 6–18 xi | 27 | 25 | 0 | 0 | 52 | 0 | 241[b] |
| SIO/IATTC | | | | | | | | | |
| Shellback | Horizon[a] | 18 v–25 viii | 3 | 19 | 142 | 52 | 216 | 0 | 974 |

| | | Depth determination | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | $PO_4$-P | Usual No. Nansen btls | No. P therms/btl | Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
| 4 | 0 | 16 | 2 | 10 | - | 83[b] | 47 GEK | Radiosonde obs; marine life watch |
| 4 | 0 | 16 | 2 | 10 | - | 56[b] | - | Marine life watch |
| 7 | 0 | 15 | 2 | 10 | - | 64[b] | - | Marine life watch |
| 1 | 0 | 16 | 2 | 10 | - | 58[b] | 89 GEK; drift cards released, all stas | Radiosonde obs; marine life watch |
| 6 | 0 | 16 | 2 | 10 | - | 64[b] | drift cards released, all stas | Microplankton sampler used, all stas; marine life watch |
| 6 | 0 | 16 | 2 | 10 | - | 62[b] | drift cards released, all stas | Carbohydrate determinations; marine life watch |
| 9 | 0 | 15 | 2 | 10 | - | 41[b] | - | Marine life watch |
| 6 | 0 | 16 | 2 | 10 | - | 47[b] | - | Radiosonde obs; marine life watch |
| 0 | 0 | 5 | 2 | 3 | - | 39[h] | - | Marine life watch |
| 5 | 0 | 5 | 2 | 3 | - | 27[b] | 47 GEK | Marine life watch |
| 2 | 0 | 6 | 2 | 2 | - | 98[b]<br>1[j]<br>6[k] | 110 GEK | Marine life watch |
| 7 | 0 | 15 | 2 | 9 | - | 47[b] | 16 GEK | Thermitow measurements; 12-hr radiosonde series, Sebastián Vizcaino Bay; 12-hr GEK series, Sta. 120.90; marine life watch |
| 2 | 0 | 15 | 2 | 9 | - | 47[b] | - | Marine life watch |
| 2 | 0 | 16 | 2 | 10 | thermograph | 45[b] | 75 GEK | 12-hr GEK series, Sta. 60.110; marine life watch |
| 9 | 0 | 16 | 2 | 10 | - | 40[b] | - | Marine life watch |
| 4 | 0 | 16 | 2 | 10 | - | 44[b] | - | Marine life watch |
| 9 | 0 | 16 | 2 | 10 | thermograph | 48[b] | 55 GEK | 12-hr GEK series, Sta. 120.90; sardine specimens off Baja Calif. for chromatographic studies; marine life watch |
| 3 | 107 | 14-16 | 2 | 8-10 | Thermitow | 204[b]<br>197[c] | 521 GEK | Samples for $SiO_3$-Si determination at 102 stas; special detailed oceanographic studies in the Peru Current, the Gulf of Guayaquil, the Gulf of Nicoya, the Galápagos Islands and on the north edge of the countercurrent; direct measurements of vertical distribution of velocity at 8 stas using current cross from drifting ship; 170 radiosonde obs; 37 productivity experiments run using radioactive tracer technique; on 2 stas special casts to collect $O_2$ isotope ratio samples; continuous record of bottom topography; 17 midwater trawls; continuous log of biological obs |

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations 0-500 m | 500-1000 m | 1000-2000 m | >2000 m | Total | T and S obs at 10 m | No. of BT obs |
|---|---|---|---|---|---|---|---|---|---|
| SIO | | | | | | | | | |
| Capricorn | Horizon[a] | 13 x 1952-14 ii 1953 | 1 | 0 | 9 | 8 | 18 | 0 | 607[b] |
| | Spencer F. Baird[a] | 21 xii 1952-4 ii 1953 | 0 | 0 | 1 | 5 | 6 | 0 | 390[b] |
| HBL | | | | | | | | | |
| HMS-14 | Hugh M. Smith | 27 i-7 iii | 6 | 26 | 15 | 0 | 47 | 0 | 455 |
| HMS-15 | Hugh M. Smith | 28 v-20 vi | 59 | 1 | 0 | 0 | 60 | 0 | 437 |
| HMS-16 | Hugh M. Smith | 27 vi-4 viii | 30 | 0 | 0 | 0 | 30 | 0 | 303 |
| HMS-17 | Hugh M. Smith | 6-15 ix | 1 | 30 | 0 | 0 | 31 | 0 | 160 |
| POG | | | | | | | | | |
| NP-52-1 | HMCS Sault Ste. Marie | 6-17 iii | 2 | 2 | 25 | 0 | 29 | 0 | 185 |
| USNEL | | | | | | | | | |
| Shuttle | USS Marysville | 24 iv-3 vi | 0 | 6 | 40 | 18 | 64 | 0 | 440 |

| | Depth determination | | | | | | |
|---|---|---|---|---|---|---|---|
| $PO_4$-P | Usual No. Nansen btls | No. P therms/btl | Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
| 0 | 15 | 1-2 | 8 | thermograph | 58[c] | 126 GEK | Two-ship study of the deep Pacific basin by seismic shooting, echo sounding, coring, magnetic surveys, measurements of heat flux; various biol., geol. and meteorol. obs (midwater trawls and chain-bag-rock dredge hauls, exploration of coral reefs and collection of flora and fauna by divers; from the Marquesas to San Diego 7 series of phyto. samples on sta between surface and 100 m and 4-hourly subsurface samples underway, radiosondes, air temp. and pressure soundings to 4000 ft, air samples for fixed nitrogen content); water samples for $O_2$, $PO_4$-P, $SiO_3$-Si and Alk.; 3 successful lowerings of bottom temp. gradient recorder (1 over Easter Island Rise); underwater photography |
| 0 | 15 | 1-2 | 8 | thermograph | 35[d] | 24 GEK | |
| 35 | 13 | 3[a] | 9 | thermograph[b] | 47[c] | 335 GEK | Depth recorder in irregular operation; bird and fish-school logs |
| 60 | 13 | 3[a] | 9 | thermograph | 60[d]<br>3[e]<br>4 pairs[f]<br>3 pairs[g] | - | 4 midwater-trawl hauls; surface trolling; continuous nighttime depth recordings; Hardy plankton recorder in operation during daylight hours between Honolulu and Sta. 1; bird and fish-school logs |
| 30 | 13 | 3[a] | 9 | thermograph | 15[h]<br>30[i]<br>30[j] | Surface drags; GEK at magnetic equator | Surface trolling between Honolulu and Sta. 1; bird and fish-school logs |
| 0 | 13 | 3[a] | 9 | thermograph | 30[k]<br>9[l] | - | Surface trolling during daylight hours; depth recorder in operation nightly during most of cruise |
| 0 | 15[b] | 1 | 10[c] | -[d] | 0 | - | - |
| 0 | 12 | 2 | shallow, 3<br>deep, 8 | - | 0 | - | - |

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations 0-500 m | 500-1000 m | 1000-2000 m | >2000 m | Total | T and S obs at 10 m | No. of BT obs |
|---|---|---|---|---|---|---|---|---|---|
| UW | | | | | | | | | |
| BB-1 | Brown Bear | 14-15 iii | 2 | 0 | 1 | 0 | 3 | 0 | 9 |
| BB-4 | Brown Bear | 29 iv-6 v | 5 | 1 | 5 | 0 | 11 | 0 | 75 |
| BB-7 | Brown Bear | 3-13 vii | 3 | 4 | 16 | 2 | 25 | 0 | 155 |
| BB-9 | Brown Bear | 19 viii-2 ix | 10 | 6 | 17 | 1 | 34 | 0 | 215 |

General Methods

Unless otherwise indicated, subsurface temperature by paired protected reversing thermometers; salinity by Knudsen method; dissolved oxygen by Winkler method aboard ship; inorganic phosphate analyses by the molybdenum-blue method (Wooster and Rakestraw, 1951).

When available, specific information on accuracy is indicated by footnotes. Absence of such information does not necessarily imply that the nominal accuracies have been achieved.

CCOFI

a CCOFI thermometer calibrations indicate the temperature accuracy to be 0.02°C; field tests indicate a salinity accuracy of ±0.025‰ (root mean square). This accuracy was achieved on Cruises 5201 through 5210, but the root mean square was estimated to be ±0.050‰ for Cruise 5211. See Notes on Particular Cruises for information concerning methods of titration on Cruises 5201-5211 and evaporation on Cruise 5201.

b Oblique plankton tow to approximately 140 m (200 m of wire out, or less in shallow water) taken with a 30XXX net, 1.0 m in diameter at mouth by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze.

c Half-hourly lowerings between station lines along the coast.

d Oblique plankton tow to approximately 424 m (600 m of wire out, or less in shallow water) taken with a 30XXX net, 1.0 m in diameter at mouth by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze.

e Half-hourly lowerings between station lines along the coast and hourly between stations on the station lines.

f One oblique plankton tow to approximately 42 m (60 m of wire out) and one to approximately 98 m (140 m of wire out) taken with a 30XXX net, 1.0 m in diameter at mouth by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze.

g Half-hourly lowerings between station lines along the coast and hourly between stations on station lines except when net tows were made between hydrographic stations. In this case one BT observation was made at the time of the net tow in lieu of hourly lowerings.

h Shallow plankton tows to various depths (3 horizontal surface, 22 vertical to 10 m, 2 to 20 m, 2 to 30 m, 3 to 40 m, 1 to 60 m, 2 to 90 m and 4 to bottom--25 to 40 m) taken with a 30XXX net, 1.0 m in diameter at mouth by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze.

i Beginning with the first station, half-hourly lowerings between station lines inshore and hourly between stations and between station lines offshore.

j One 10-hour horizontal surface plankton tow in Turtle Bay taken with standard one-meter net.

k Six shallow oblique plankton tows to depths of from 6 m to 21 m (10 to 30 m of wire out) taken with a standard one-meter net. These tows were made in Santa Maria Bay, Magdalena Bay, Almejas Bay and Concepción Bay and lasted from 2 to 7 hours.

| | Depth determination | | | | | | |
|---|---|---|---|---|---|---|---|
| $PO_4$-P | Usual No. Nansen btls | No. P therms/btl | Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
| 0 | 8 | 2 | 2[b] | - | 0 | - | 1 piston core |
| 0 | 12 | 2 | 4[b] | 60[c] | 0 | 81 GEK | - |
| 9[d] | 13 | 2 | 3[b] | 91[c] | 0 | 25-hr GEK time study | - |
| 0 | 12 | 2 | 5[b] | 59[c] | 0 | 84 GEK | - |

SIO/IATTC

a Thermometer calibrations indicate the temperature accuracy to be 0.02°C.
b Quantitative plankton tow with a one-meter net hauled obliquely from a depth of 300 m to the surface.
c Qualitative microplankton tow with a 17-cm net hauled vertically from 100 m to the surface.

SIO

a BT observations every two hours en route to the Marshall Islands.
b Oblique macroplankton haul from 150 and 450 m, using a one-meter net.
c Vertical microplankton haul between the surface and 50 m, using a net of No. 20 mesh size.

HBL

a One only in Nansen bottle at the surface; two per bottle at other depths.
b Thermograph in operation through Station 16.
c Oblique plankton hauls to 200 m taken at each hydrographic station with a net 1.0 m in diameter at mouth; duration, 30 minutes.
d Oblique plankton hauls to 200 m taken with a net 1.0 m in diameter at mouth and 0.656 mm in aperture size; duration, 30 minutes.
e Oblique plankton hauls to 200 m taken with a net 1.0 m in diameter at mouth and 0.3 mm in aperture size; duration, 30 minutes.
f Phytoplankton samples taken at 10 and 20 m, using two Clarke-Bumpus samplers five inches in diameter at mouth; duration, one hour.
g Simultaneously with the first three pairs of phytoplankton samples collected at 10 and 20 m with Clarke-Bumpus samplers, three pairs of nets, 1.0 m in diameter at mouth and 0.31 mm in aperture size, were towed at depths of from one to two fm; duration, one hour.
h Oblique plankton hauls to 200 m; duration, 30 minutes.
i Collections made using Clarke-Bumpus samplers at three levels with simultaneous surface tows. The samplers were 5 in. in diameter at mouth and 0.31 mm in aperture size; duration, one hour.
j Surface tows made simultaneously with Clarke-Bumpus collections, using a net 1.0 ft in diameter at mouth and 0.31 mm in aperture size; duration, one hour.
k Oblique plankton hauls to 200 m taken with a net 1.0 m in diameter at mouth and 0.65 mm in aperture size; duration; 30 minutes.
l Surface phytoplankton hauls taken with a net 1.0 m in diameter at mouth and 0.31 mm in aperture size; duration, 30 minutes.

POG

a Observations at top 6 depth intervals and bottom 6 intervals.
b Fjarlie bottles (Fjarlie, 1953).
c Five unprotected thermometers between 60 and 160 m; 5 between 200 and 1000 m.
d At BT observation.

UW

a Dissolved oxygen by the modified Winkler method described by Thompson and Robinson (1939).
b On deep stations.
c Bucket temperatures in conjunction with BT observations.
d Inorganic phosphate by the method described by Robinson and Thompson (1948), except that the color intensity was measured by an electric-eye photometer rather than Nessler tubes (Ford, 1950).

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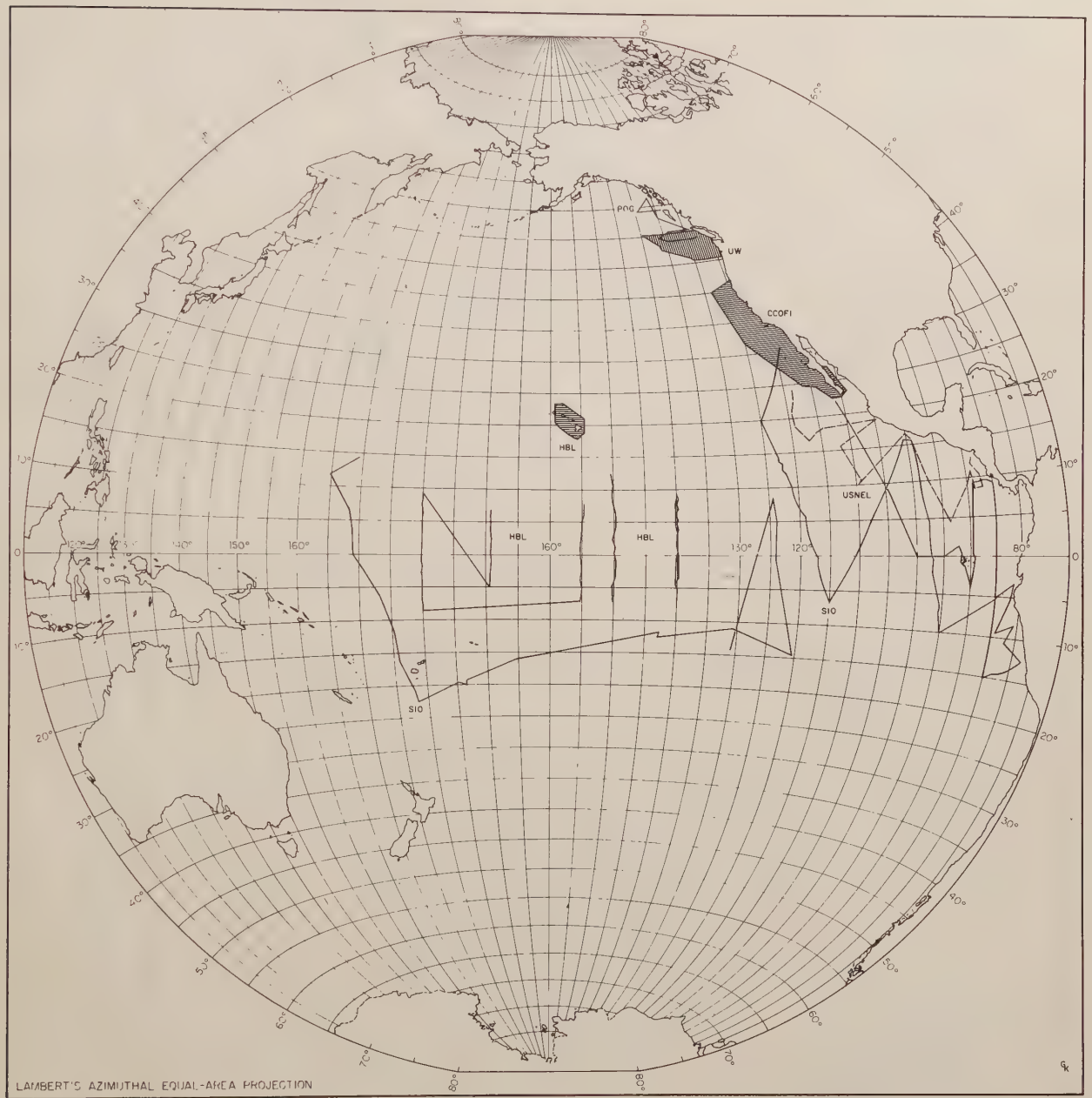


**CHART 1. General location chart**

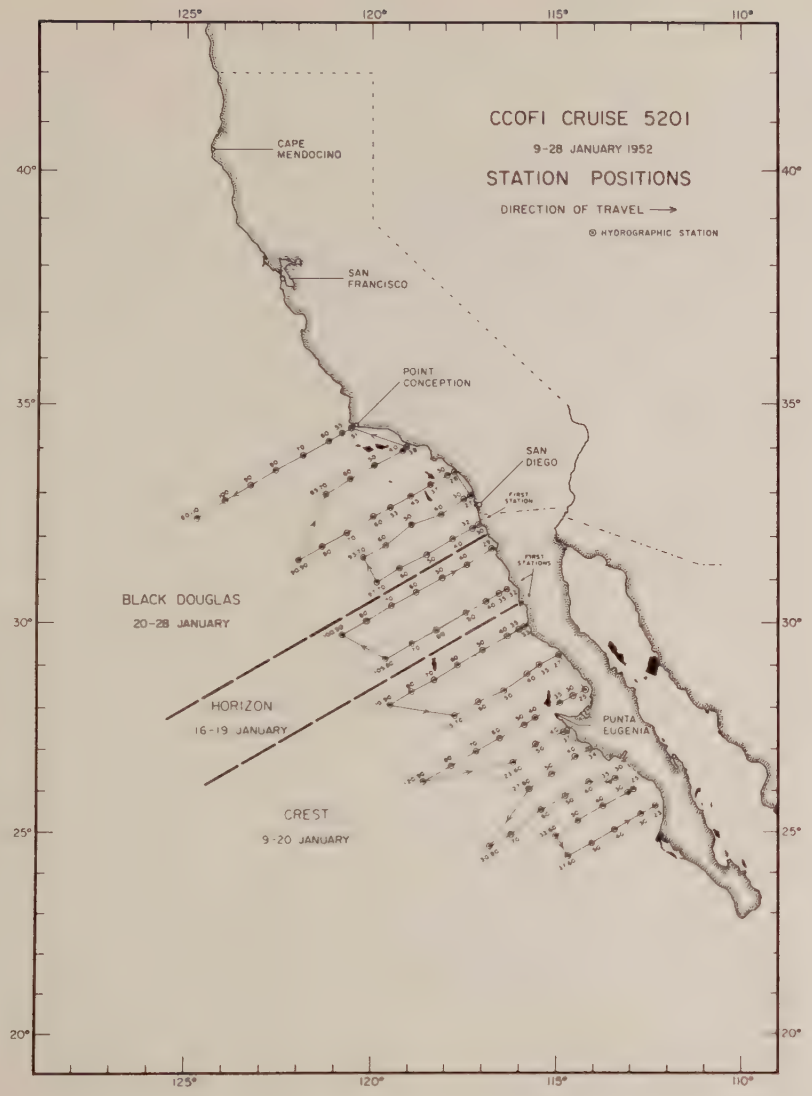


CHART 2. Station positions, CCOFI, Cruise 5201

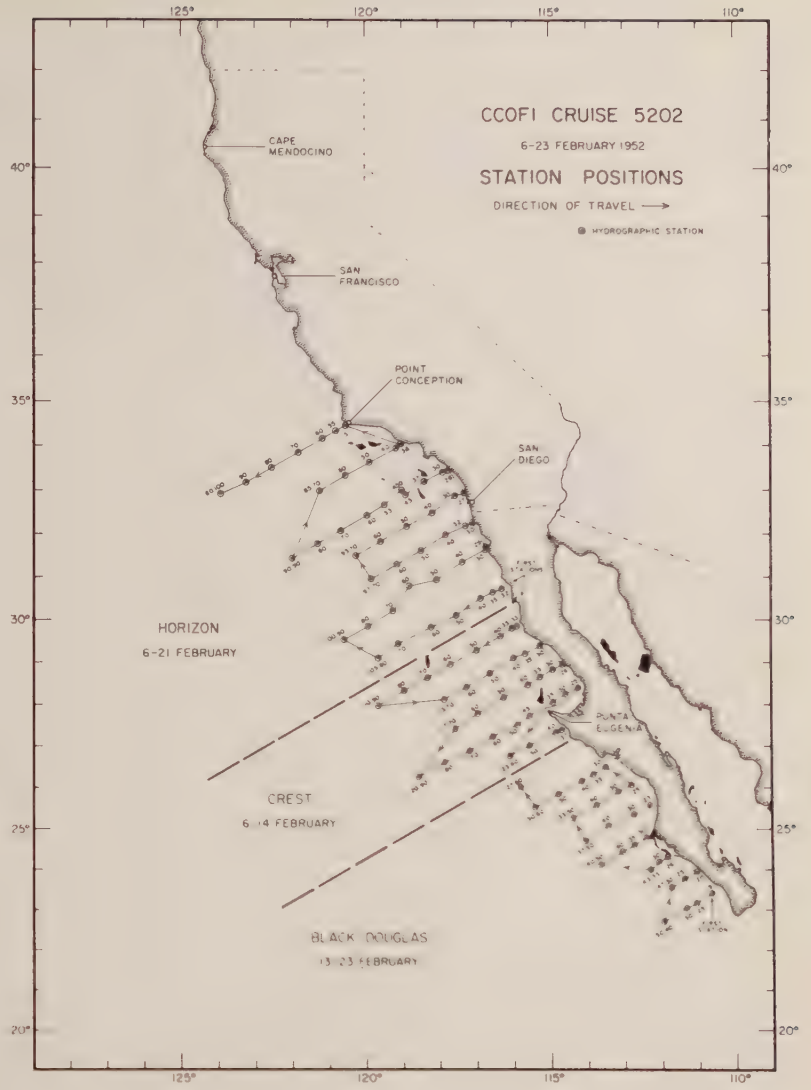


CHART 3. Station positions, CCOFI, Cruise 5202

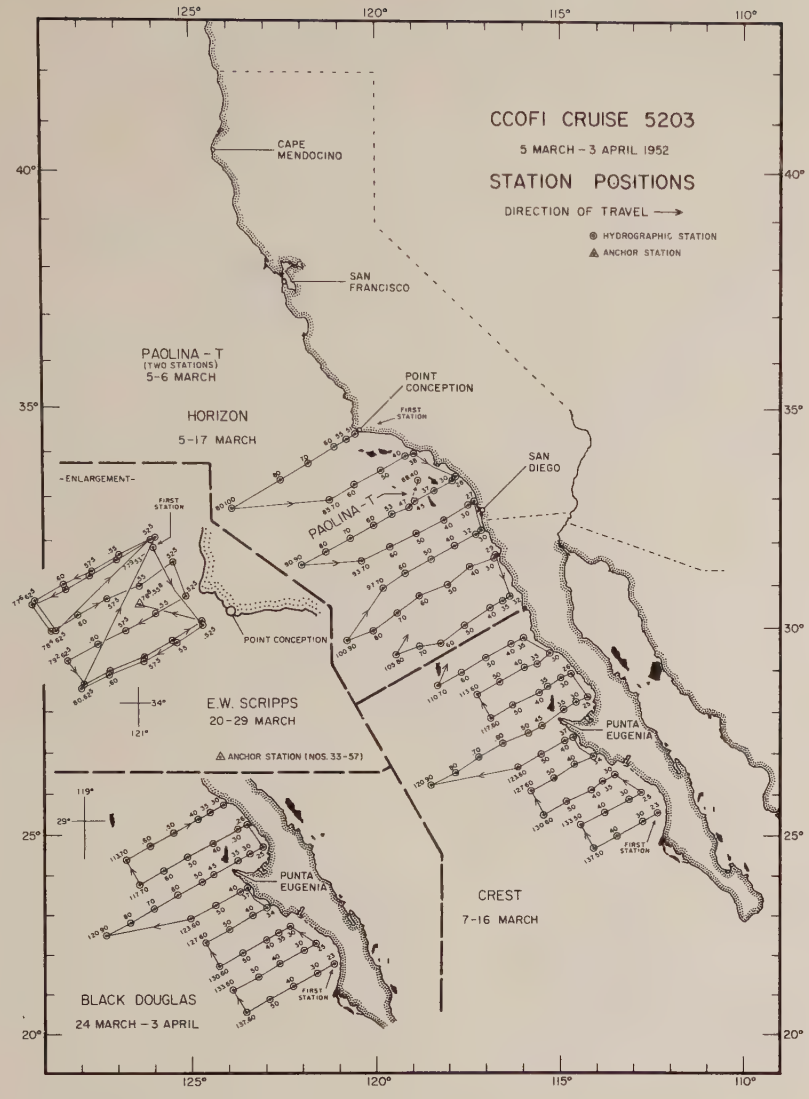


CHART 4. Station positions, CCOFI, Cruise 5203

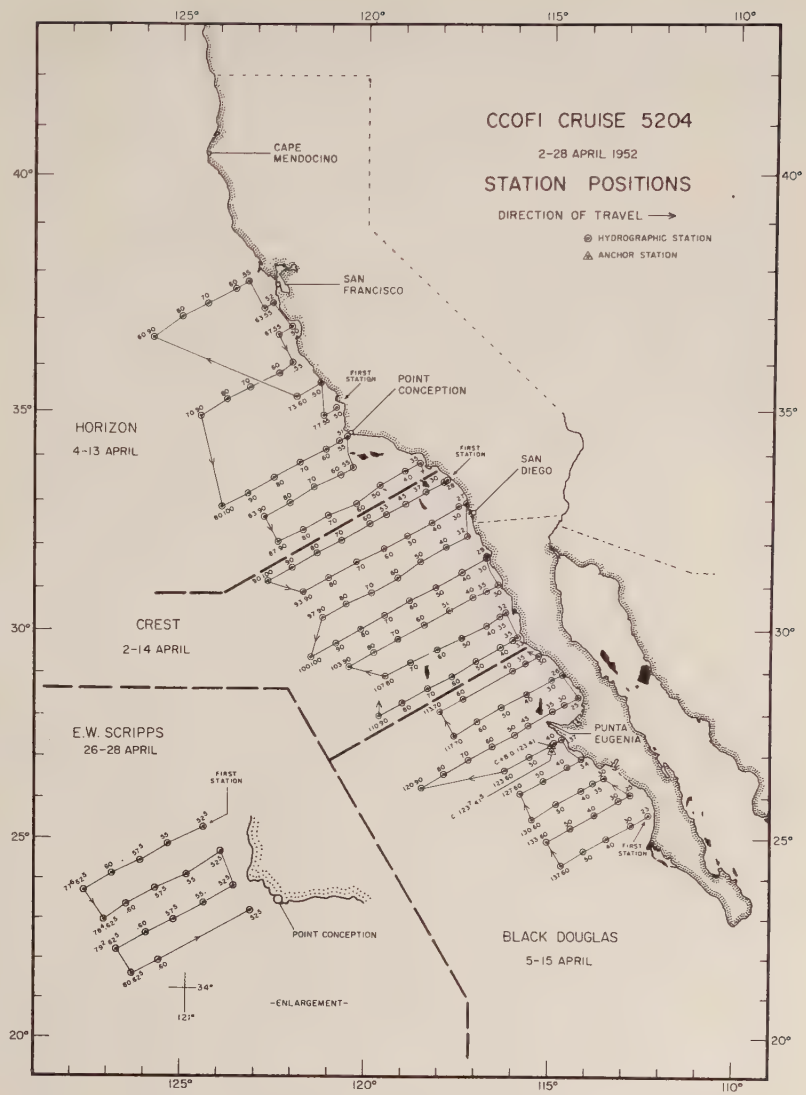


CHART 5. Station positions, CCOFI, Cruise 5204

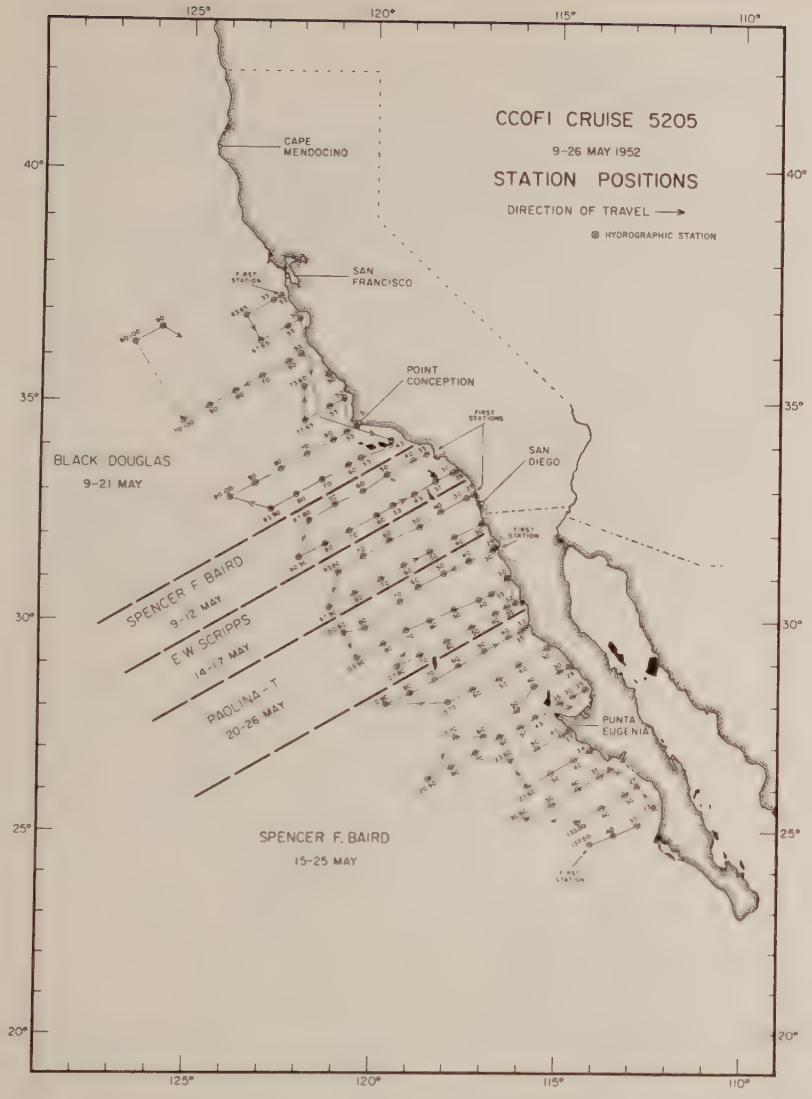


CHART 6. Station positions, CCOFI, Cruise 5205

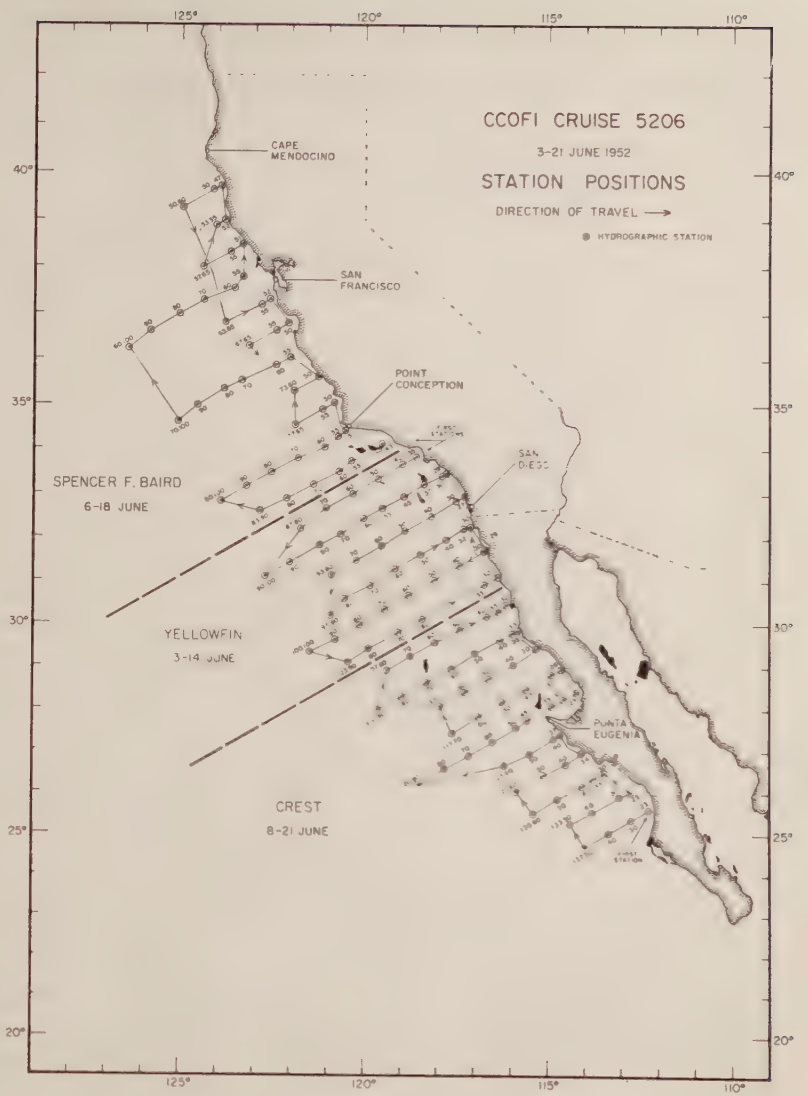


CHART 7. Station positions, CCOFI, Cruise 5206

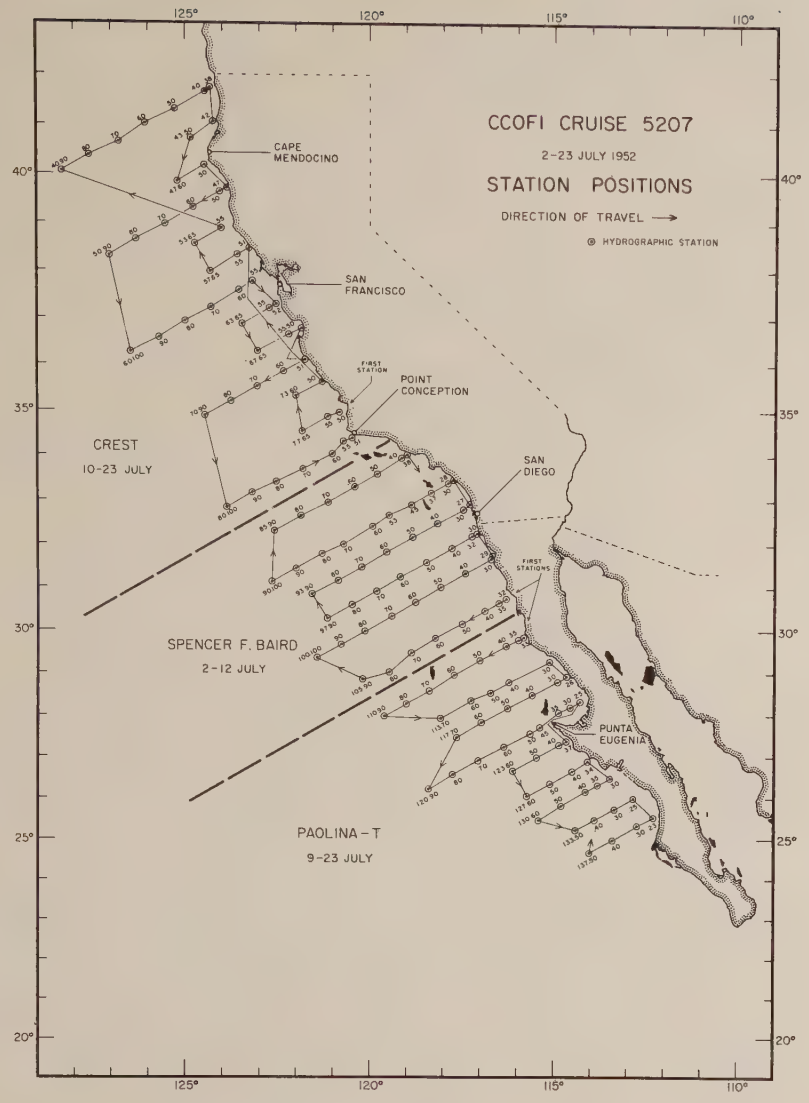


CHART 8. Station positions, CCOFI, Cruise 5207

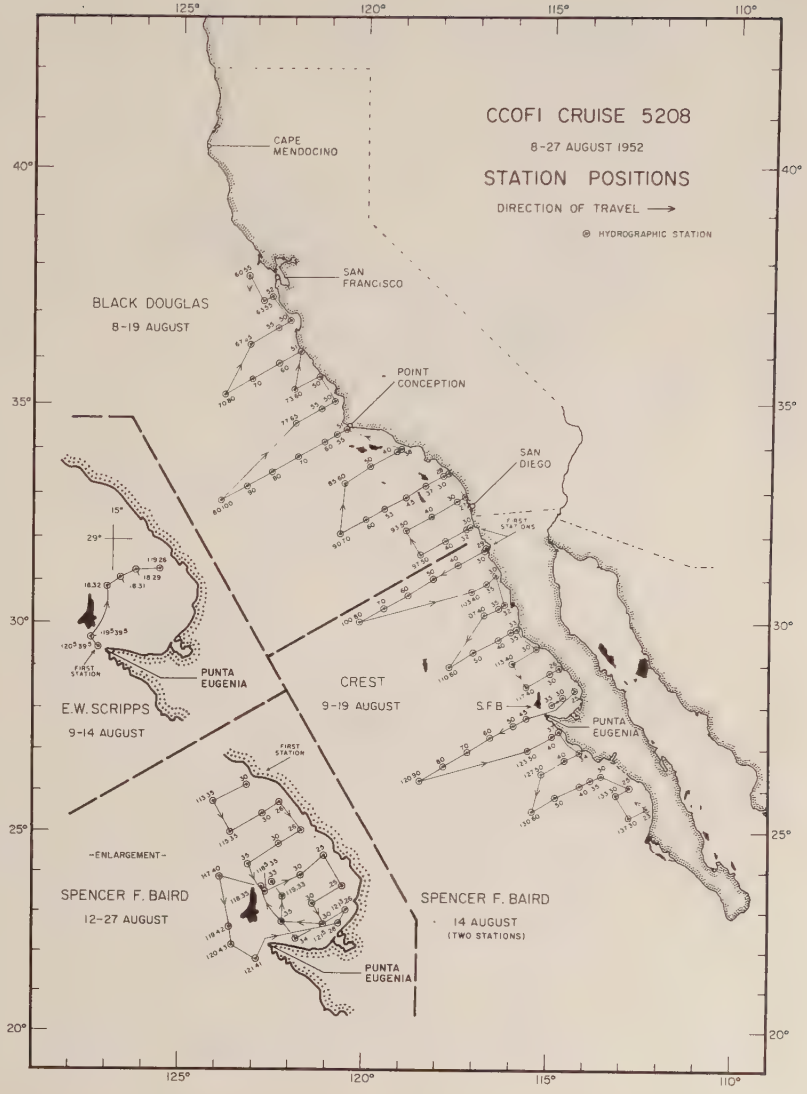


CHART 9. Station positions, CCOFI, Cruise 5208

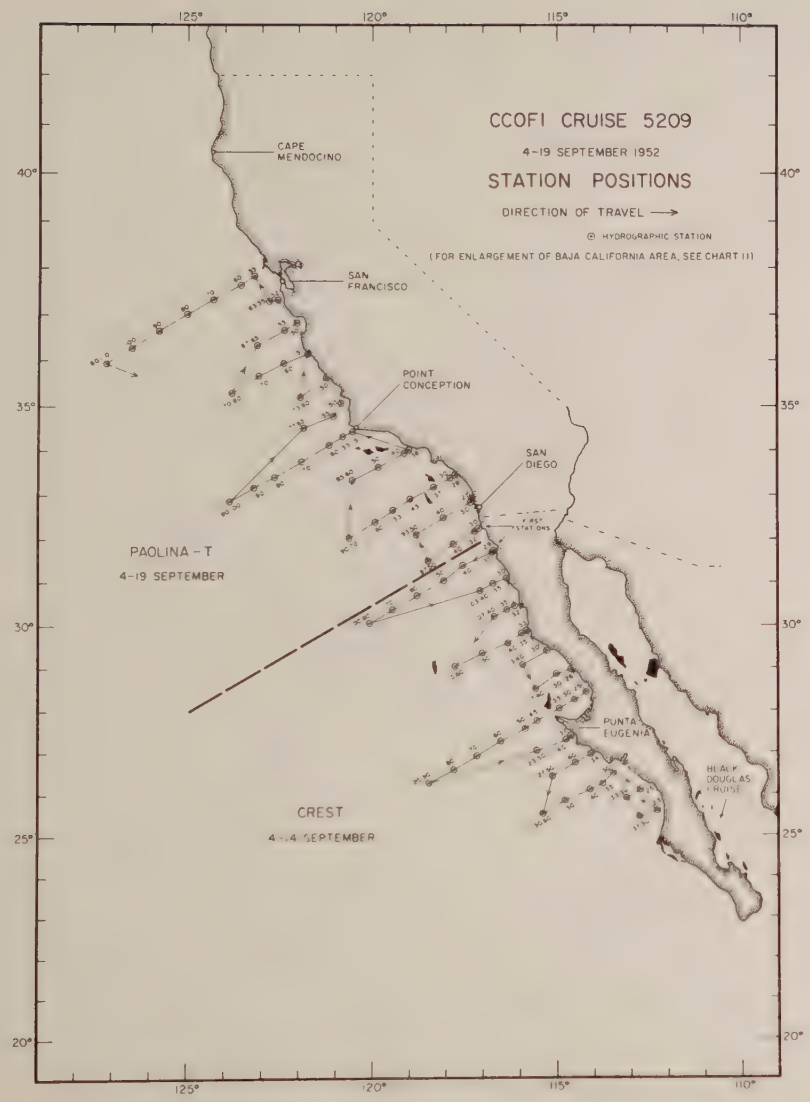


CHART 10. Station positions, CCOFI, Cruise 5209

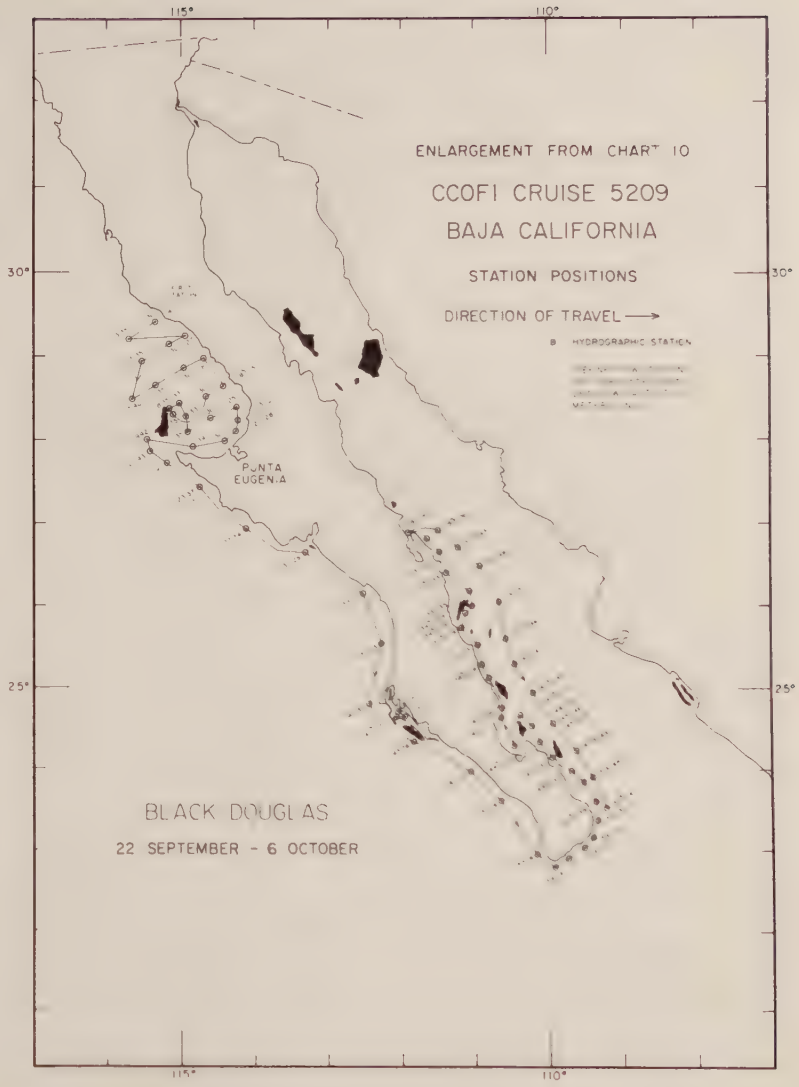


CHART 11. Station positions, Gulf of California, CCOFI, Cruise 5209

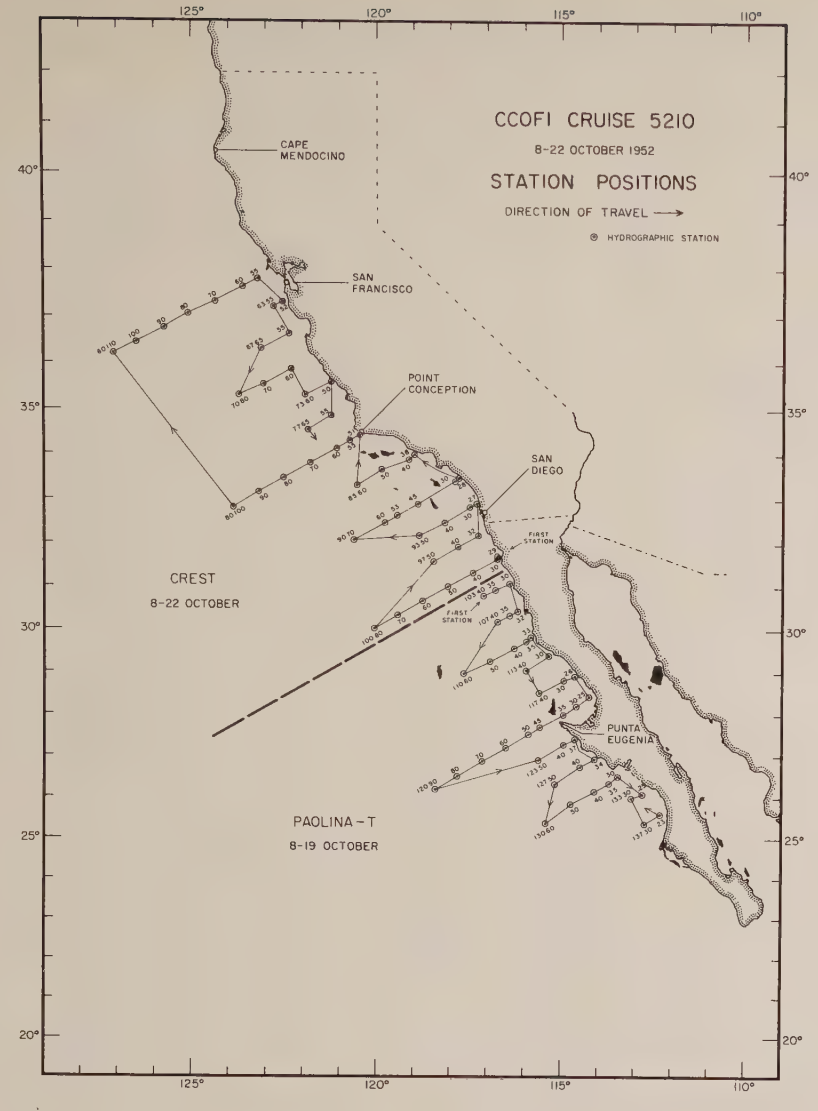


CHART 12. Station positions, CCOFI, Cruise 5210

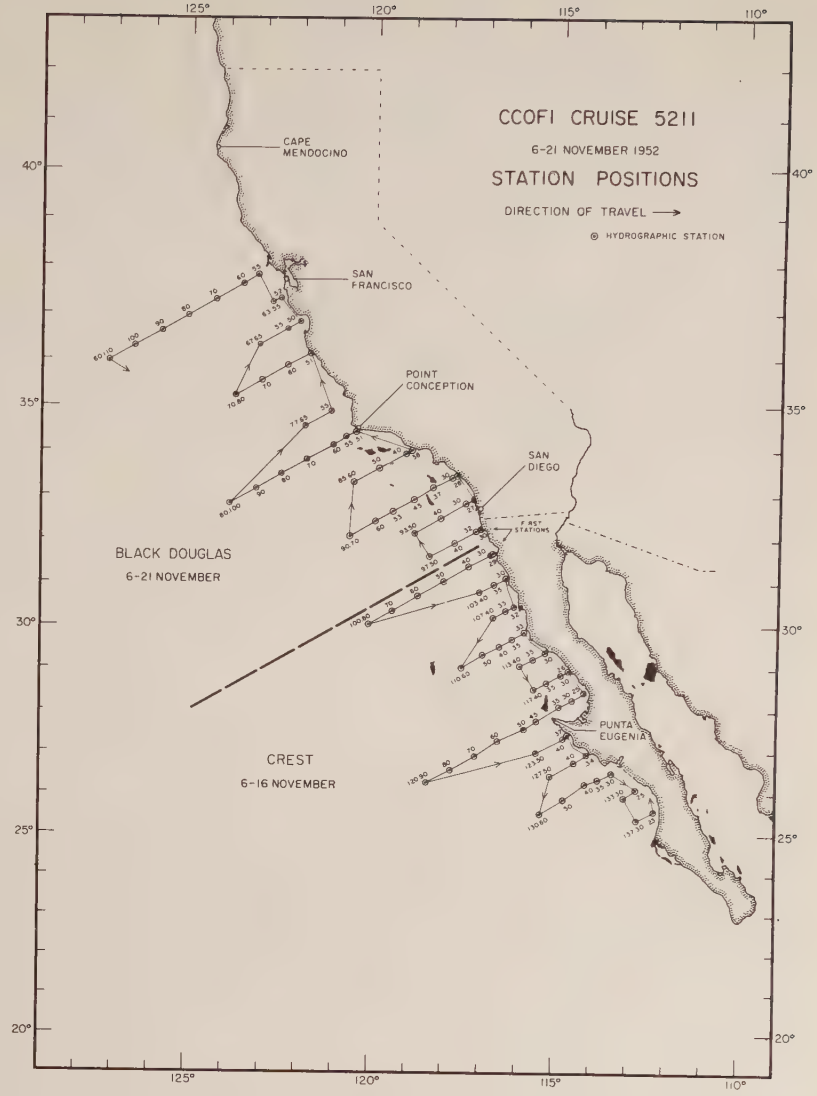


CHART 13. Station positions, CCOFI, Cruise 5211

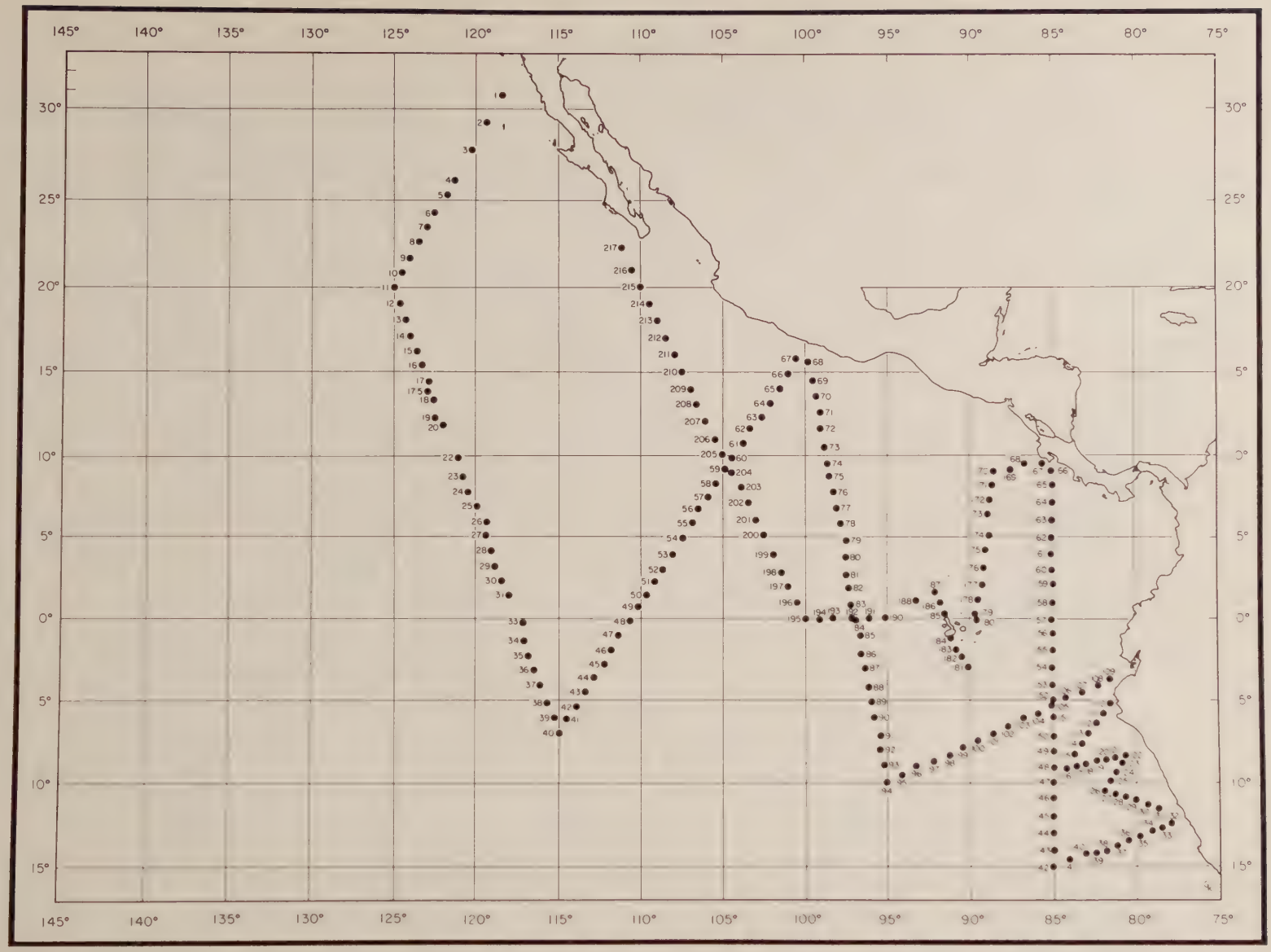


CHART 14. Station positions, Scripps Institution of Oceanography and Inter-American Tropical Tuna Commission, RV Horizon on Expedition Shellback

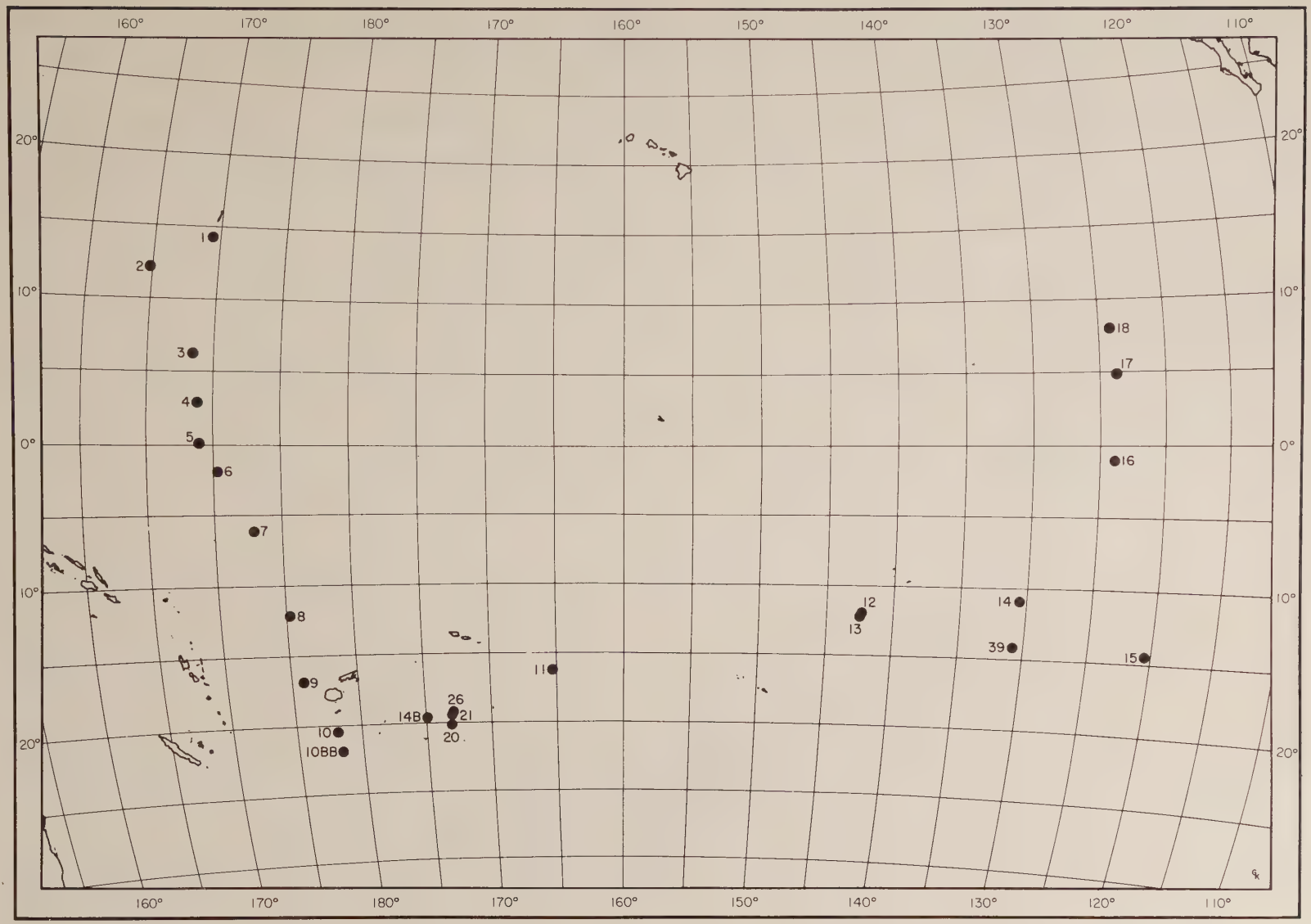


CHART 15. Station positions, Scripps Institution of Oceanography, RV Spencer F. Baird and RV Horizon on Expedition Capricorn

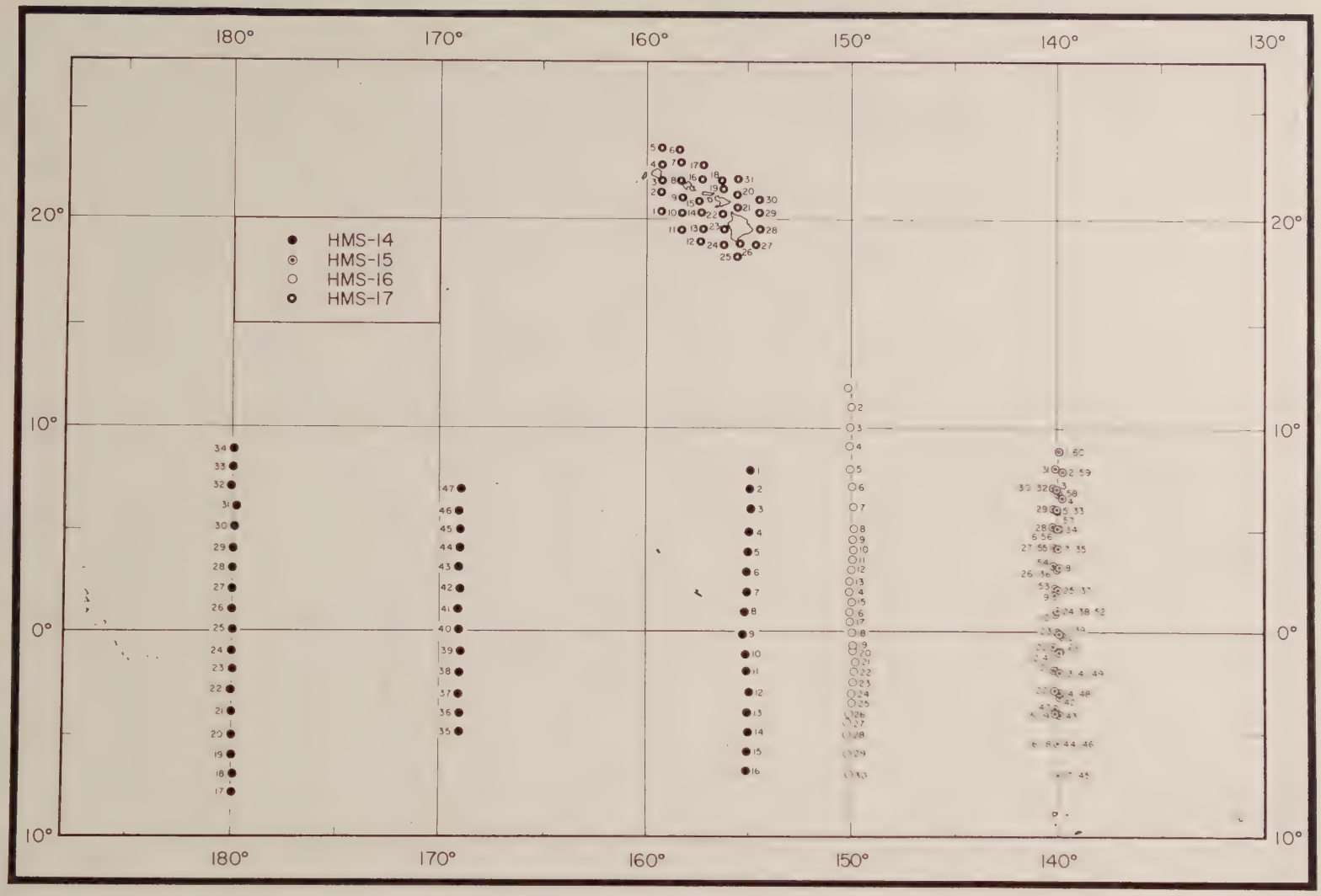


CHART 16. Station positions, Bureau of Commercial Fisheries, Honolulu, Cruises 14, 15, 16 and 17 of RV Hugh M. Smith

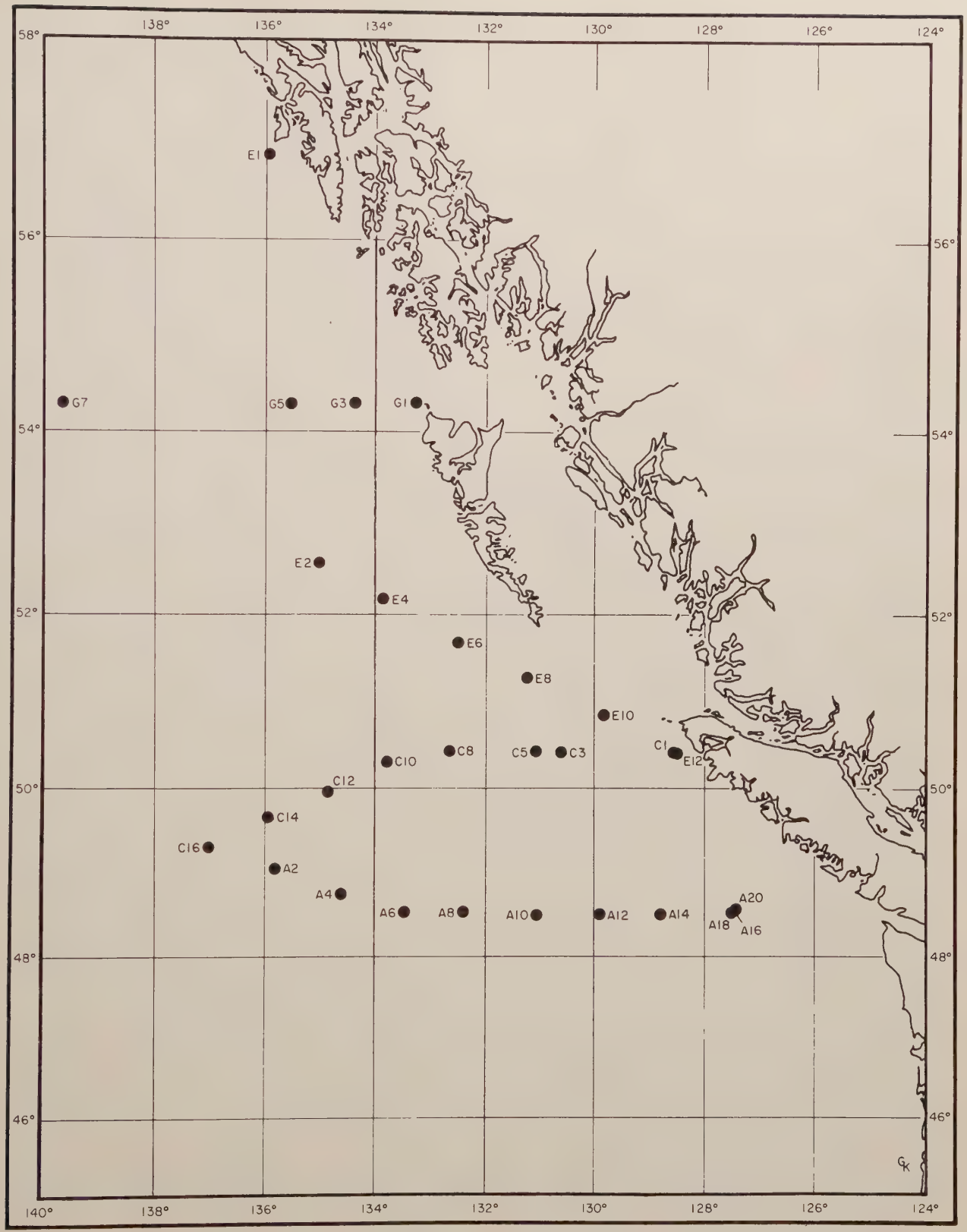


CHART 17. Station positions, Pacific Oceanographic Group, HMCS Sault Ste. Marie on Cruise NP-52-1

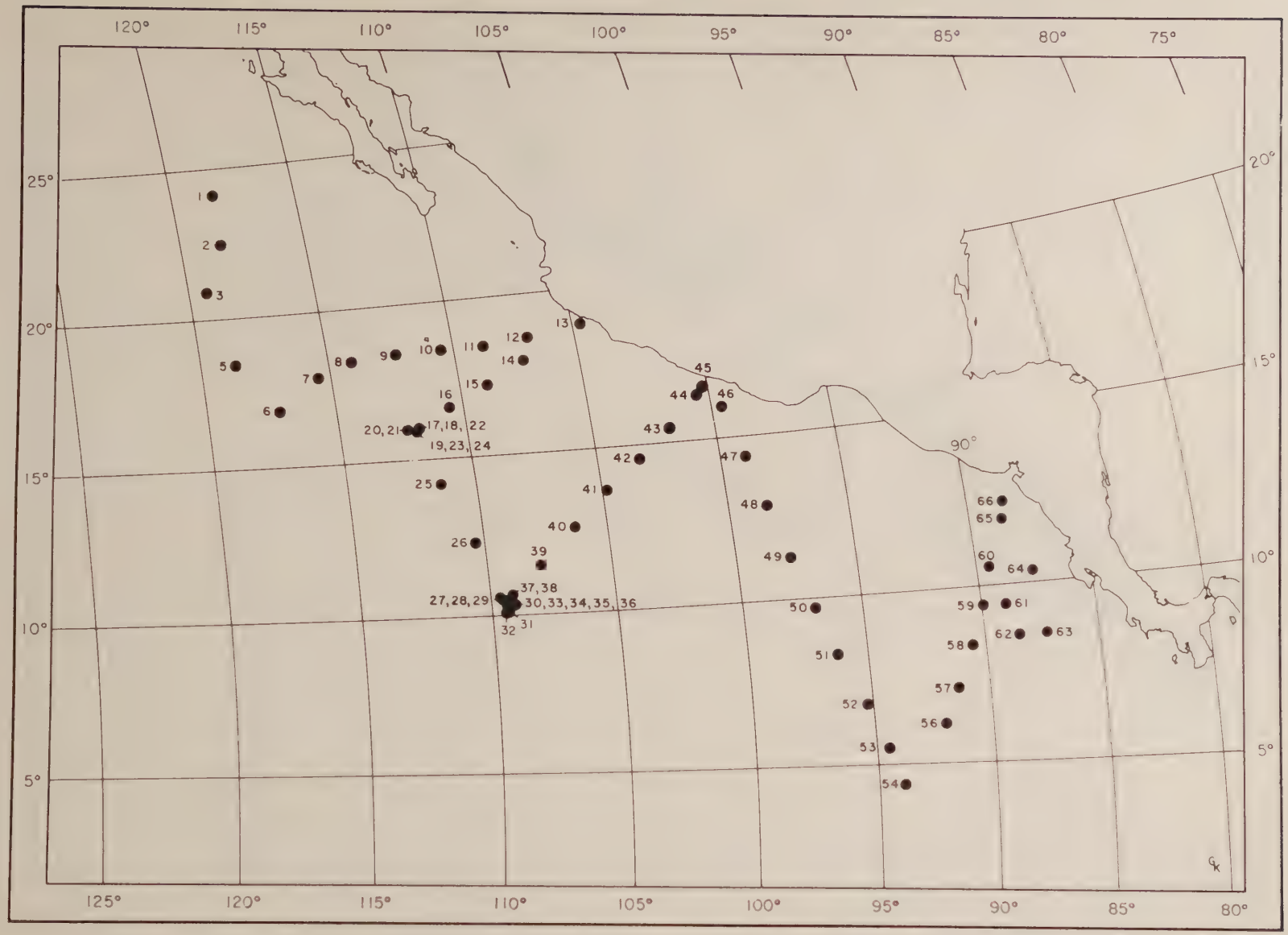


CHART 18. Station positions, U. S. Navy Electronics Laboratory, USS Marysville on Expedition Shuttle

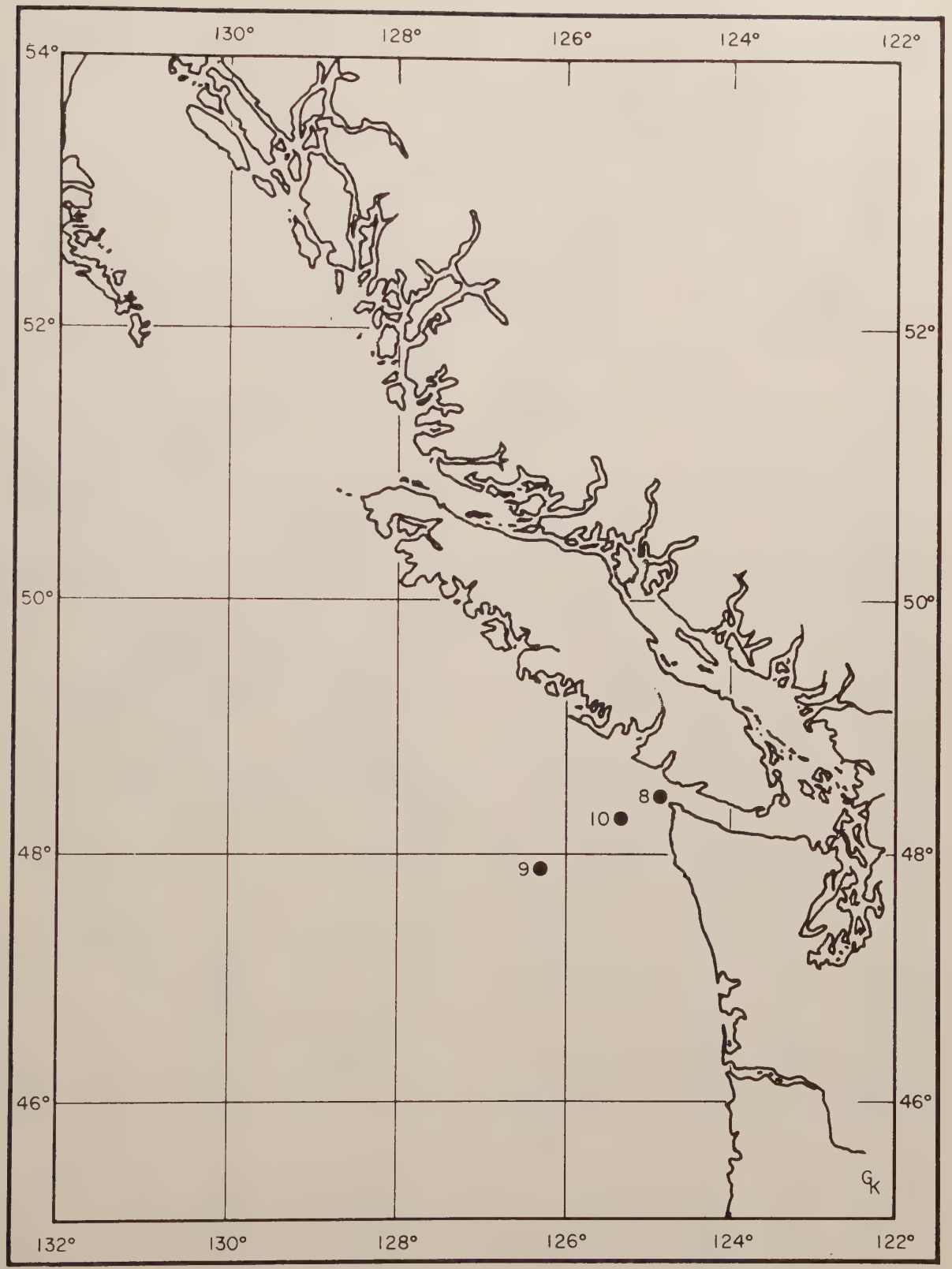


CHART 19. Station positions, University of Washington, Cruise 1 of RV Brown Bear

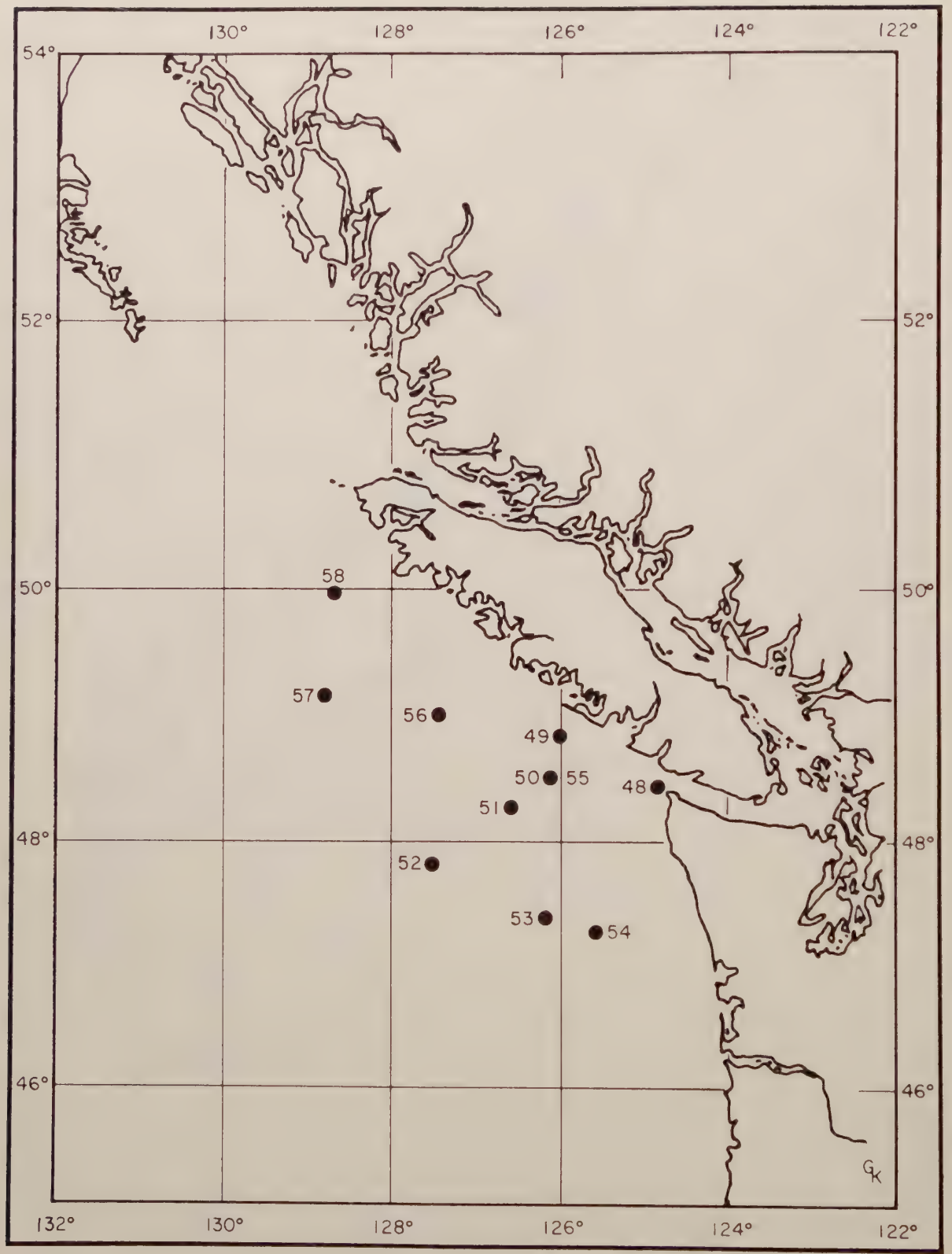


CHART 20. Station positions, University of Washington, Cruise 4 of RV Brown Bear

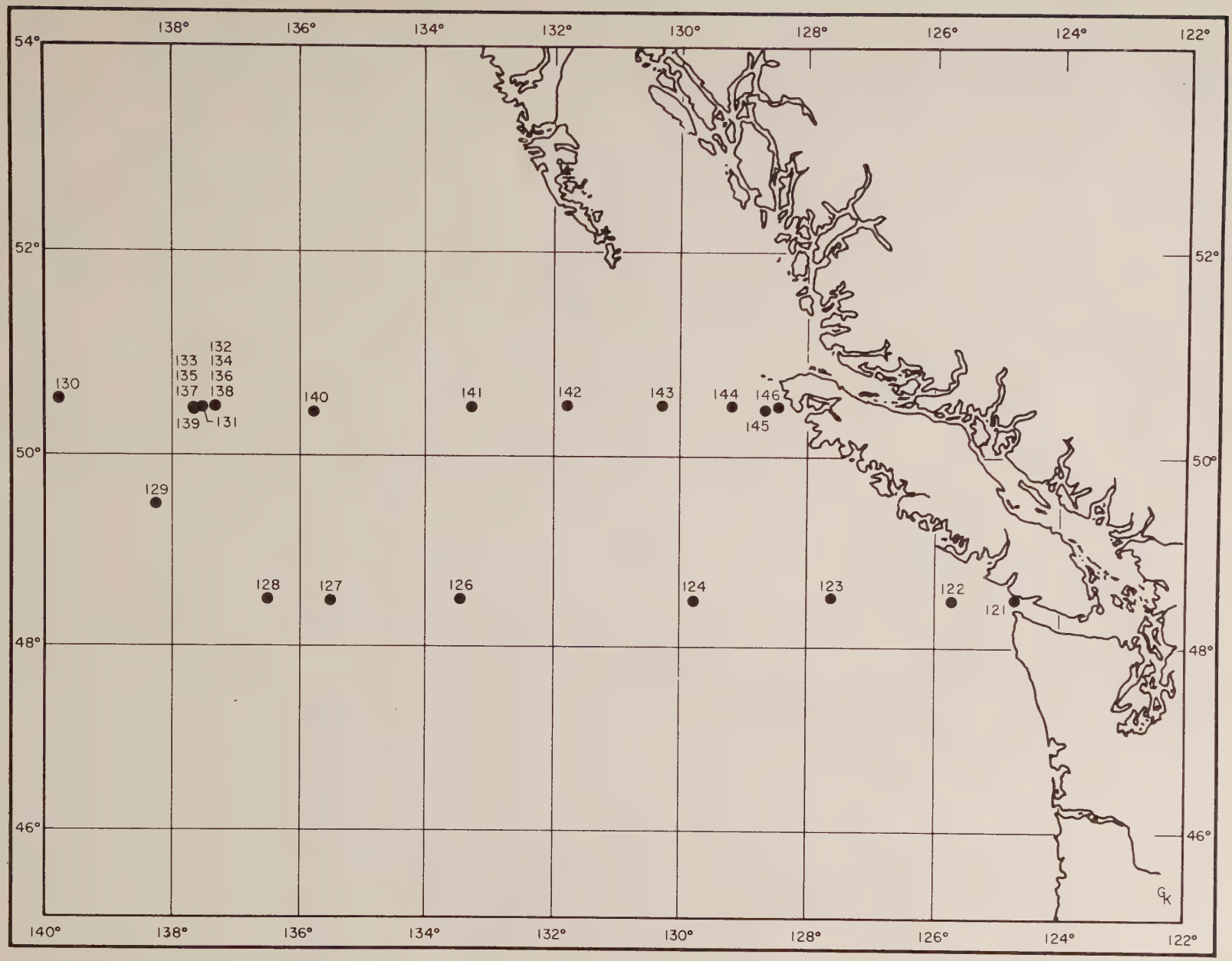


CHART 21. Station positions, University of Washington, Cruise 7 of RV Brown Bear

CHART 22. Station positions, University of Washington, Cruise 9 of RV Brown Bear

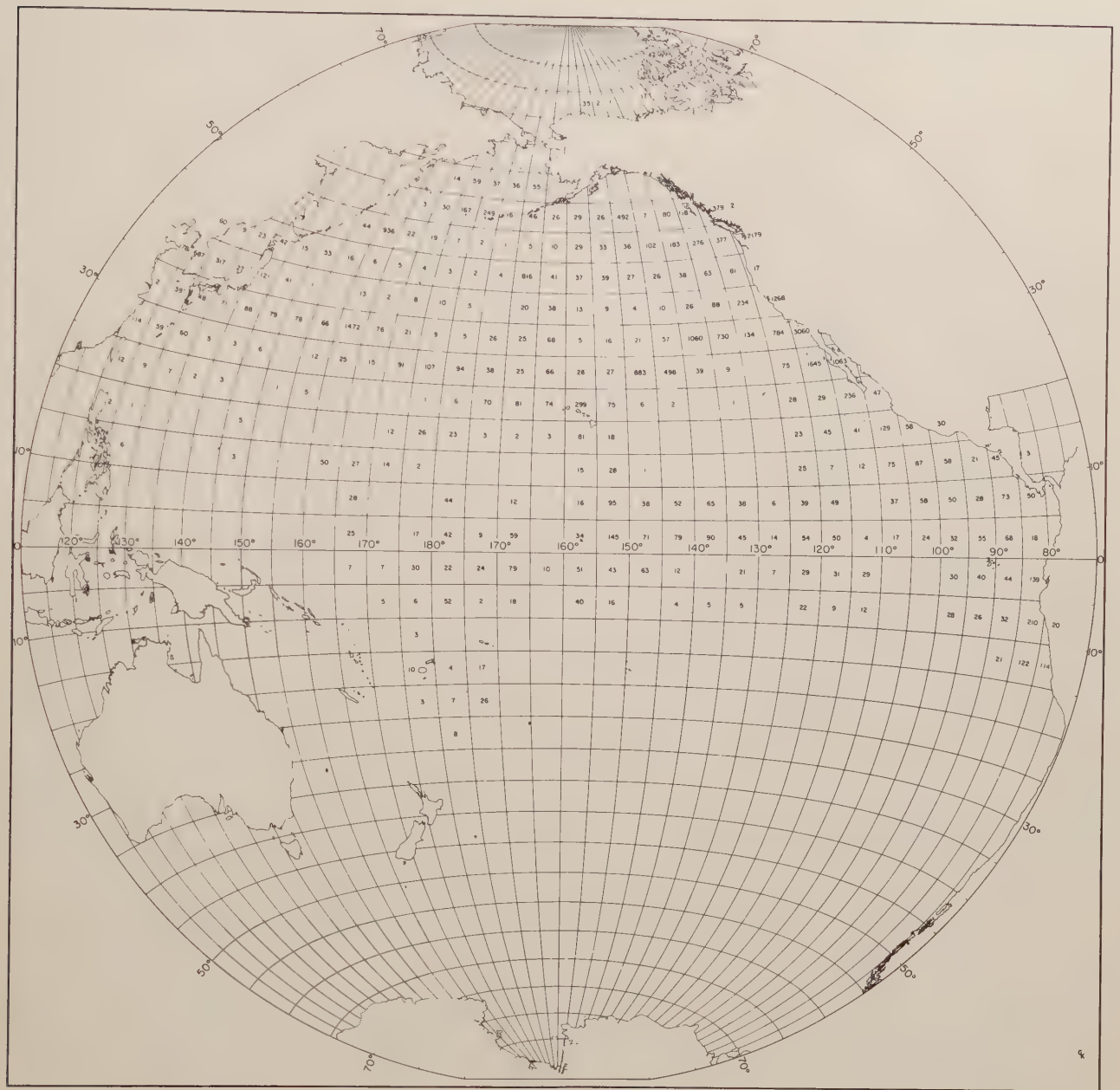

CHART 23. Bathythermograph observations, North and South Pacific, 1952; total, 29,077

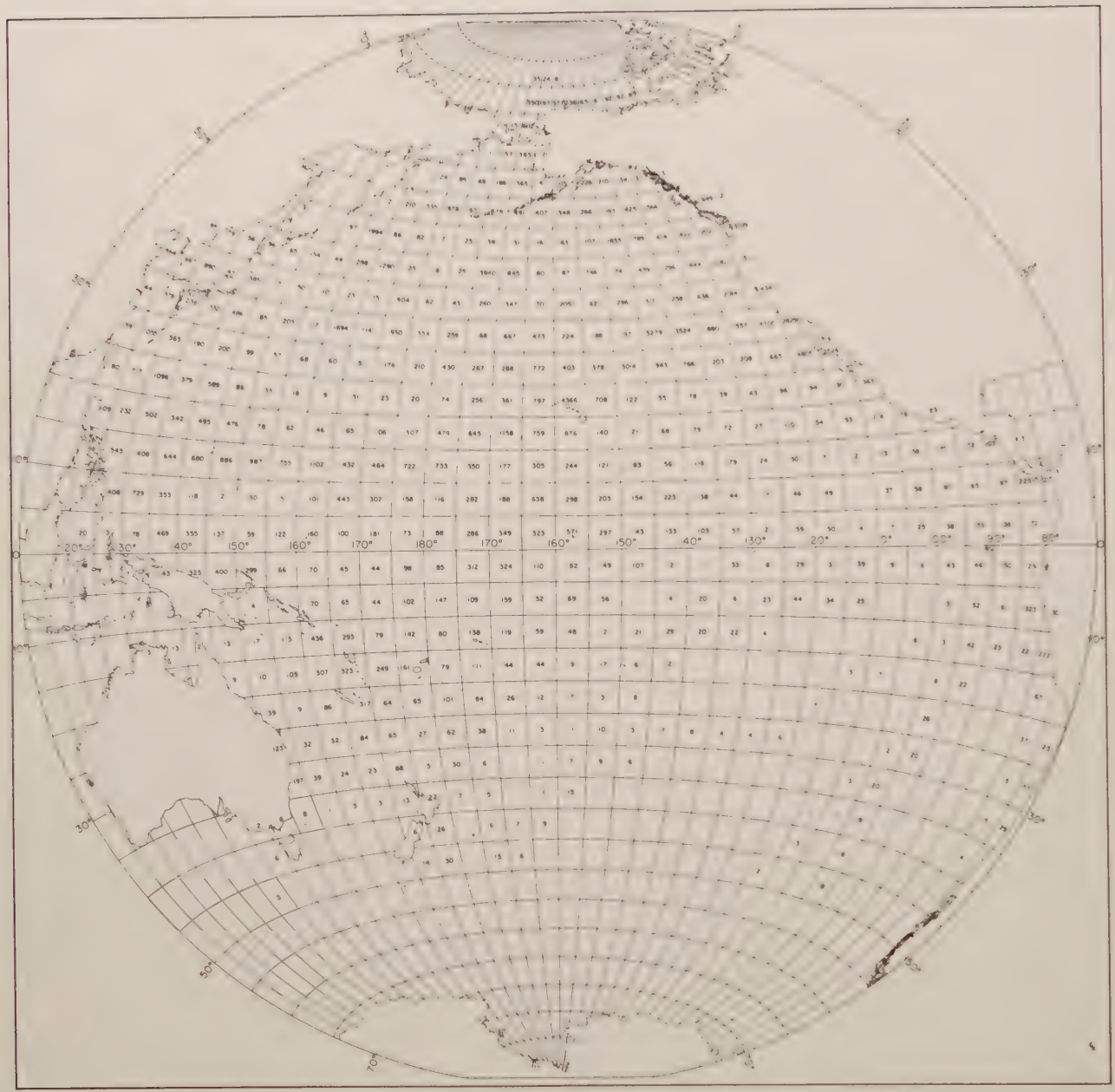

CHART 24. Bathythermograph observations, North and South Pacific, 1941–1952; total, 179,680

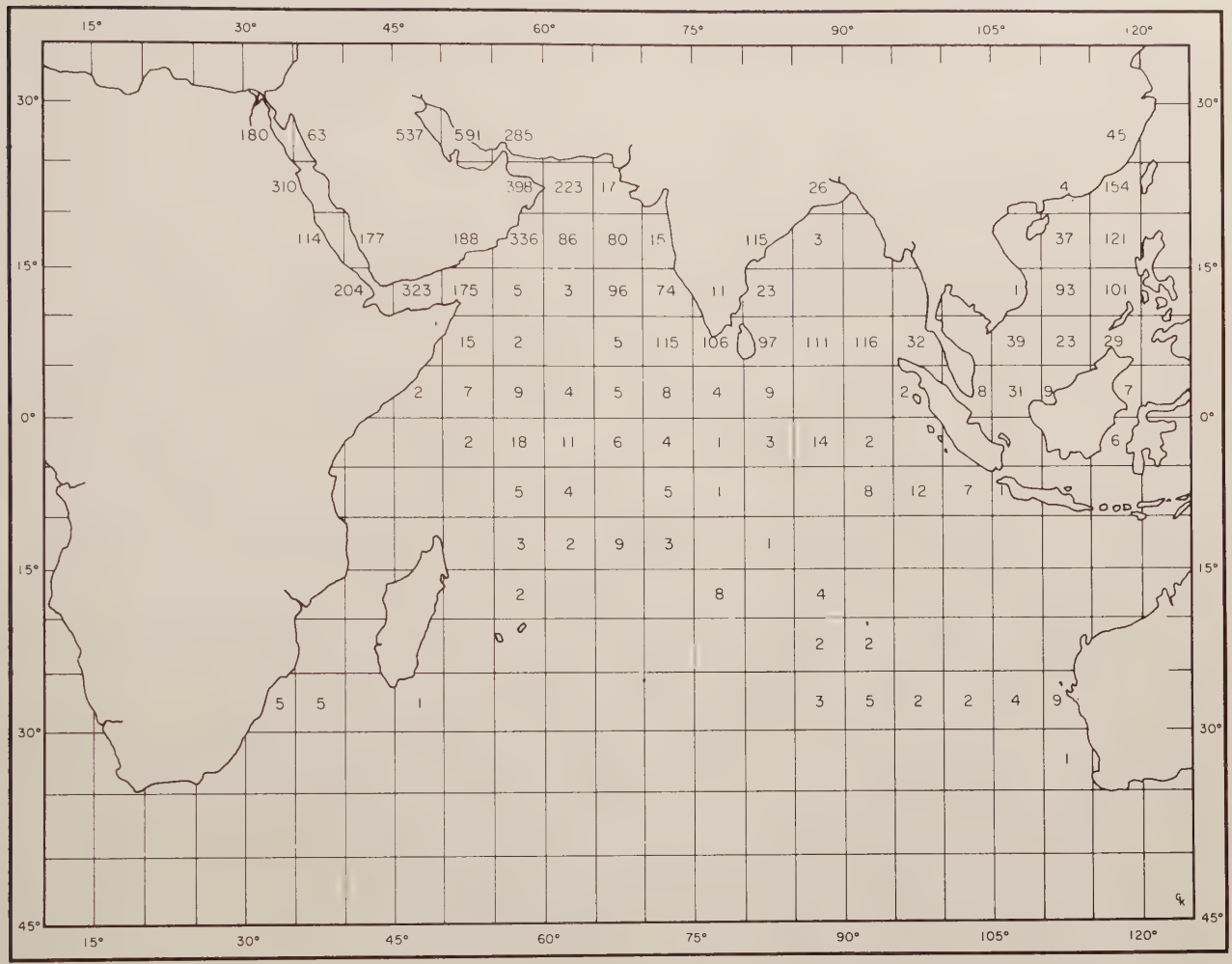


CHART 25. Bathythermograph observations, Indian Ocean, 1941–1952; total, 6,192

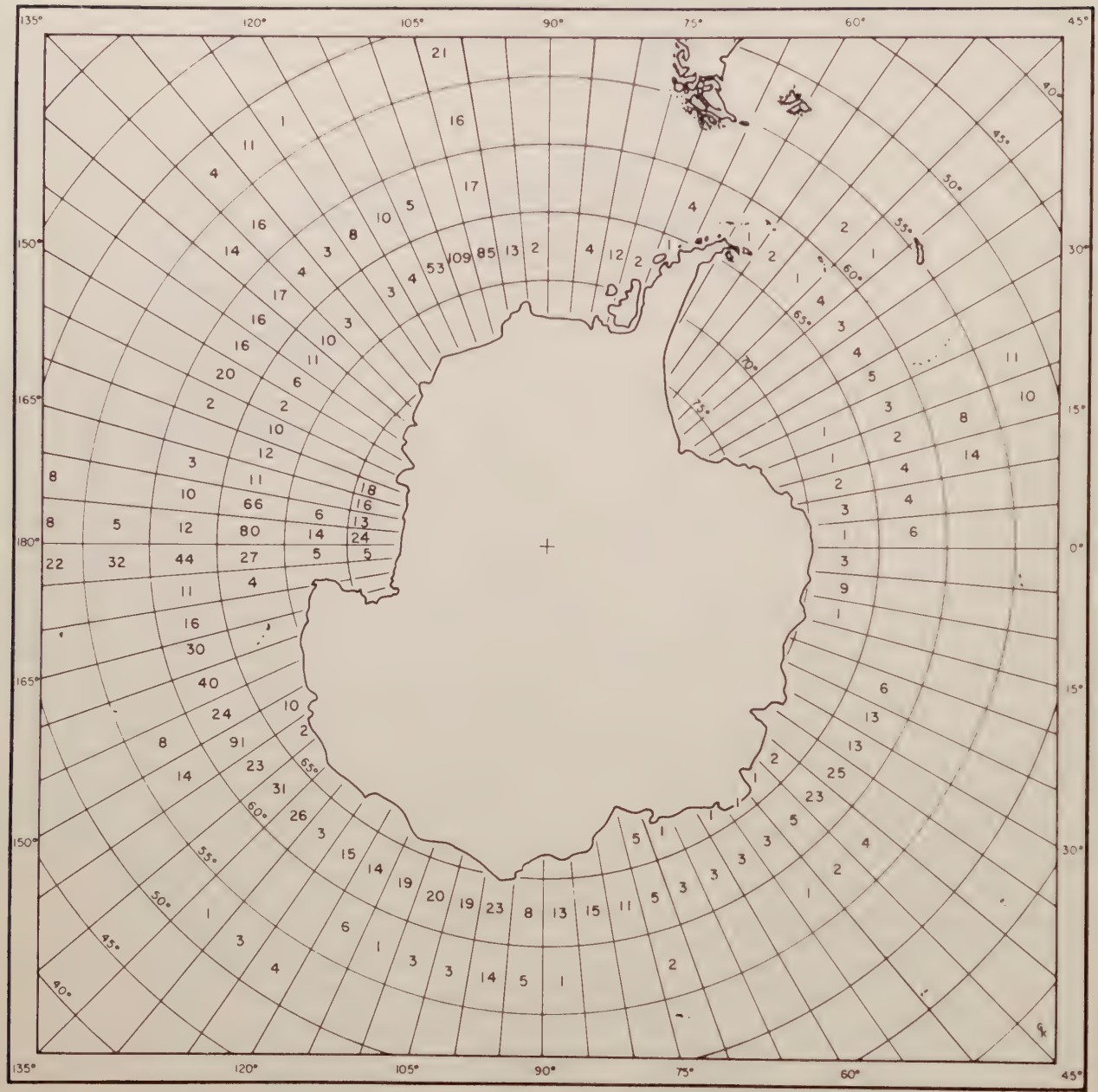


CHART 26. Bathythermograph observations, Antarctic Ocean, 1941–1952; total, 1,736

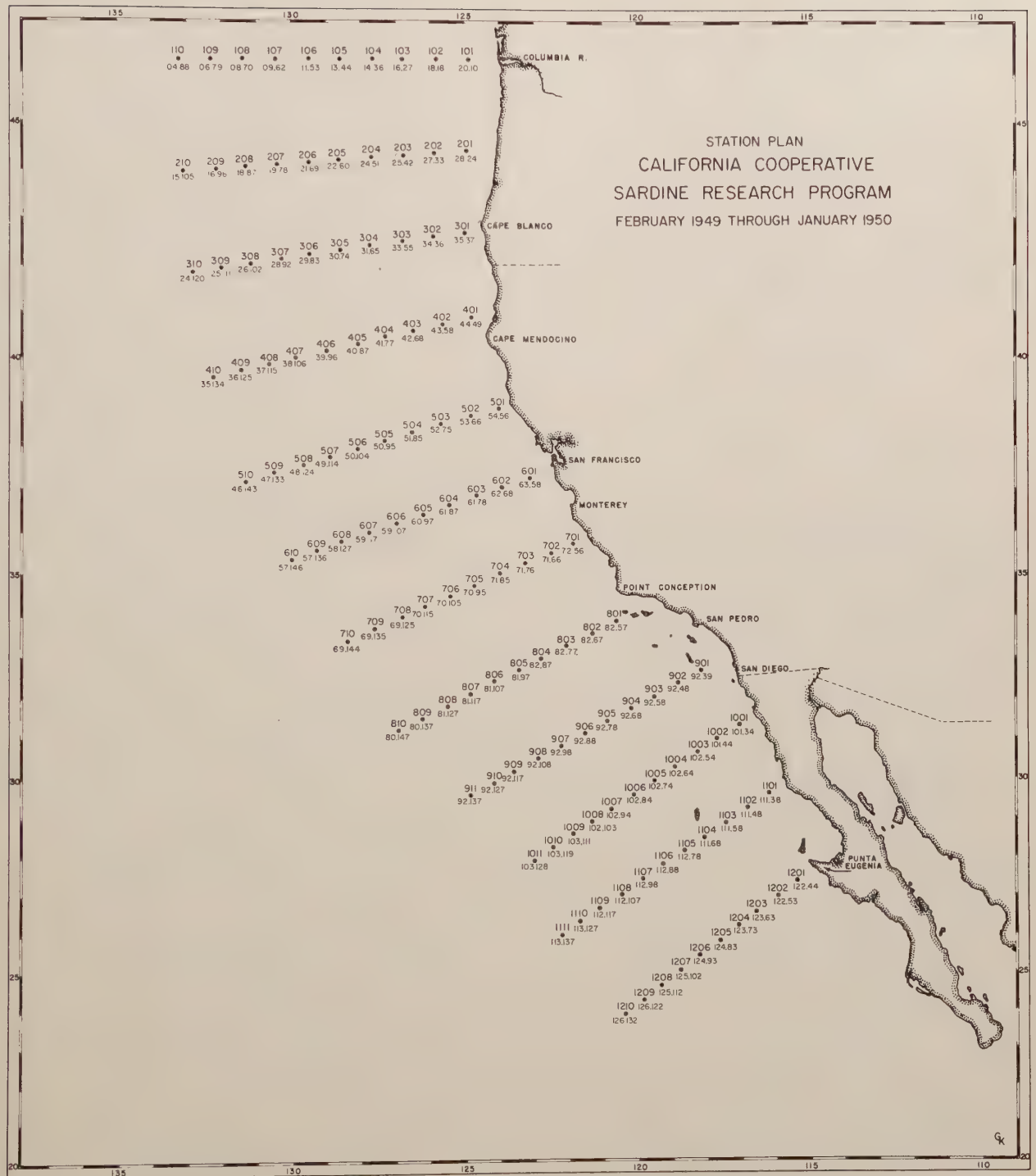


CHART 27. Station plan of the California Cooperative Oceanic Fisheries Investigations (formerly California Cooperative Sardine Research Program) from February, 1949, to January, 1950, inclusive, with equivalent numbers according to present station numbering system

# Explanation of Tables

SIDE RUNNING HEADS

Cruise-identifying information is shown in the margin near the top of the page. The first line is an abbreviation of the name of the organization responsible for the data. The second and third lines give the cruise identification. In the case of data collected in the California Cooperative Oceanic Fisheries Investigations research program, for example, CCOFI 5201 signifies the January cruise of 1952.

Individual station numbers are given in the margin opposite the station data. The letter "D" preceding the number indicates a drogue station; the letter "K," an anchor station. The letter "G" inserted in the station number denotes a station in the Gulf of California. Raised numbers for the CCOFI stations indicate a position between lines or between stations of the standard station pattern. Station locations are shown in the appropriate position charts.

HEADINGS OF GROUPS OF COLUMNS

OBSERVED: Corrected data at accepted depths of observation.

INTERPOLATED: Data at standard depths, interpolated from smooth distribution curves or by machine-interpolation programs (see Notes on Particular Cruises). The standard depths are those selected by the agencies.

COMPUTED: The results of computations based, in general, on interpolated values.

COLUMN HEADINGS

Z — Depth in meters at which observation was made or an interpolated value obtained.

T — Temperature of water in degrees Celsius.

S — Salinity of water in grams per kilogram (‰).

$O_2$ — Concentration of dissolved oxygen in milliliters per liter (ml/L).

$PO_4$-P — Concentration of dissolved inorganic phosphorus in microgram atoms per liter (μg at/L) or micromoles per liter.

$SiO_3$-Si — Concentration of dissolved silicon in microgram atoms per liter (μg at/L) or micromoles per liter.

$\sigma_t$ — Sigma-t in grams per liter (g/L). Sigma-t can be defined

$$\sigma_t = 1000\ (\rho_{ST0} - 1)$$

where $\rho_{ST0}$ is the density, in grams per milliliter, of water of salinity, S, temperature, T, and at standard atmospheric pressure. Density is expressed in these units to be consistent with the tables used for the computations.

$\delta$ — Specific volume anomaly, in centiliters per ton (cl/ton), although a few of the column headings state $10^{-5}cm^3/g$. The difference between the two units is negligible in these data (Pollak, 1961), but the correct units are centiliters per ton (or $10^{-5}ml/g$). Specific volume anomaly is defined as the difference between the specific volume of the water at a specified depth and the specific volume of a standard water with salinity of 35‰ and temperature of 0°C at the same depth. Specific volume anomaly is expressed in these units to be consistent with the tables used for the computations.

$\delta_T$ — Thermosteric anomaly, the pressure-independent part of the specific volume anomaly. Specific volume anomaly is defined

$$\delta = \alpha_{stp} - \alpha_{35,0,p}$$

and is computed as

$$\delta = \Delta_{st} + \delta_{sp} + \delta_{tp}$$

The quantity $\Delta_{st}$ has been discussed by Sverdrup, Johnson and Fleming (1946, p. 58) and approximately represents potential specific volume anomaly. It is used here with the name (thermosteric anomaly), symbol ($\delta_T$) and unit (centiliter per ton) suggested by Montgomery and Wooster (1954) although a few of the column headings state $10^{-5}cm^3/g$. The difference between the two units is negligible in these data (Pollak, 1961), but the correct units are centiliters per ton.

$\Delta D$ — Geopotential anomaly, in dynamic meters (dynamic height), of the layer of water between the surface and the designated standard pressure. Geopotential anomaly is the difference between the geopotential thickness of the observed layer and the geopotential thickness of a layer bounded by the same pressures but having standard temperature, 0°C, and salinity, 35‰. The tabulated anomaly is determined from an approximation of the integral

$$\Delta D = \int_0^{p_z} \delta\ dp$$

where p is pressure in decibars (assumed equal to depth in meters) and subscript z denotes the value at the bottom of the layer under consideration. Since geopotential thickness is the product of geometrical thickness and the acceleration of gravity, a dynamic meter is equal to $10^5$ ergs per gram and is the change in geopotential over a vertical distance of approximately 1.02 meter.

## SUPPLEMENTARY STATION INFORMATION

Supplementary information about each station is to be found just above the tabulated data. This information includes name of ship, date and time of observation, geographical location of station, depth of water, wind direction and force (usually Beaufort scale), a description of surface weather and sea state, and wire angle. When there is more than one cast on a station, messenger times and wire angles are given for the casts in the order of increasing depth.

## NOTES ON THE TABULATION OF DATA

1. Observed temperatures obtained by thermograph, bucket thermometer or bathythermograph are reported only to tenths of a degree. Temperatures by reversing thermometer are reported to hundredths of a degree.

2. Missing observed values are indicated by a hyphen (-).

3. Extrapolated values and values interpolated between remote observations are entered within parentheses.

4. Observed data from different casts are separated by a blank line.

5. The following notations have been used where appropriate.

For premature or delayed closure of water bottle and reversal of thermometers:

p pretrip or posttrip

For values which are not used in interpolation because they seem to be in error:

r rejected value

u uncertain value

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| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 26, 1952; 1222 GCT; 34°26.5'N, 120°32.5'W; sounding, 50 fm; wind, 310°, force 3; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | 80.51 |
| 0 | 13.24 | 33.19 | 300 | 0 | 13.24 | 33.19 | 24.96 | 300 | 0.00 |
| 10 | 13.24 | 33.21 | 299 | 10 | 13.24 | 33.21 | 24.98 | 299 | 0.03 |
| 20 | 13.26 | 33.19 | 300 | 20 | 13.26 | 33.19 | 24.96 | 300 | 0.06 |
| 30 | 13.19 | 33.21 | 298 | 30 | 13.19 | 33.21 | 24.99 | 298 | 0.09 |
| 48 | 12.63 | 33.21 | 287 | 50 | (12.60) | (33.21) | (25.11) | (287) | (0.15) |
| BLACK DOUGLAS; January 26, 1952; 1522 GCT; 34°19'N, 120°48.5'W; sounding, 420 fm; wind, 310°, force 2; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | 80.55 |
| 0 | 12.73 | 33.15 | 293 | 0 | 12.73 | 33.15 | 25.03 | 293 | 0.00 |
| 10 | 12.73 | 33.12 | 296 | 10 | 12.73 | 33.12 | 25.01 | 296 | 0.03 |
| 25 | 12.66 | 33.22 | 287 | 20 | 12.69 | 33.14 | 25.03 | 293 | 0.06 |
| 49 | 12.49 | 33.37 | 273 | 30 | 12.62 | 33.30 | 25.17 | 280 | 0.09 |
| 73 | 10.50 | 33.22 | 249 | 50 | 12.47 | 33.37 | 25.26 | 272 | 0.14 |
| 97 | 9.96 | 33.42 | 226 | 75 | 10.40 | 33.22 | 25.52 | 248 | 0.21 |
| 148 | 8.93 | 33.89 | 175 | 100 | 9.89 | 33.44 | 25.77 | 223 | 0.27 |
| 195 | 8.48 | 34.04 | 157 | 150 | 8.91 | 33.90 | 26.29 | 174 | 0.37 |
| 242 | 7.89 | 34.00 | 152 | 200 | 8.43 | 34.04 | 26.48 | 156 | 0.45 |
| 289 | 7.72 | 34.13 | 140 | 250 | 7.84 | 34.01 | 26.54 | 150 | 0.53 |
| 341 | 7.04 | 34.13 | 130 | 300 | 7.63 | 34.13 | 26.67 | 138 | 0.61 |
| 388 | 6.49 | 34.14 | 123 | 400 | 6.39 | 34.14 | 26.84 | 121 | 0.74 |
| 435 | 6.19 | 34.18 | 116 | 500 | 6.01 | | | | |
| 483 | 6.06 | 34.27 | 108 | 600 | (5.39) | | | | |
| 587 | 5.48 | 34.25 | 102 | | | | | | |
| BLACK DOUGLAS; January 26, 1952; 1846, 1941 GCT; 34°09.5'N, 121°09'W; sounding, 1250 fm; wind, 280°, force 1; weather, partly cloudy; sea, moderate; wire angle, 04°, 05°. | | | | | | | | | 80.60 |
| 0 | 13.01 | 33.13 | 300 | 0 | 13.01 | 33.13 | 24.96 | 300 | 0.00 |
| 10 | 12.95 | 33.12 | 300 | 10 | 12.95 | 33.12 | 24.97 | 300 | 0.03 |
| 25 | 12.82 | 33.28 | 285 | 20 | 12.87 | 33.24 | 25.08 | 289 | 0.06 |
| 50 | 12.16 | 33.30 | 272 | 30 | 12.75 | 33.28 | 25.13 | 284 | 0.09 |
| 74 | 10.10 | 33.42 | 228 | 50 | 12.16 | 33.30 | 25.26 | 272 | 0.14 |
| 98 | 9.94 | 33.73 | 202 | 75 | 10.10 | 33.53 | 25.81 | 220 | 0.21 |
| 149 | 9.33 | 33.91 | 179 | 100 | 9.94 | 33.76 | 26.01 | 200 | 0.26 |
| 195 | 8.57 | 34.09 | 155 | 150 | 9.31 | 33.91 | 26.24 | 179 | 0.35 |
| | | | | 200 | 8.49 | 34.07 | 26.49 | 155 | 0.44 |
| 194a) | 8.62 | 34.04 | 159 | 250 | 7.90 | 34.14 | 26.63 | 141 | 0.52 |
| 286 | 7.58 | 34.16 | 135 | 300 | 7.43 | 34.16 | 26.72 | 133 | 0.59 |
| 382 | 6.62 | 34.18 | 121 | 400 | 6.47 | 34.18 | 26.87 | 119 | 0.72 |
| 474 | 5.89 | 34.20 | 111 | 500 | 5.75 | 34.23 | 27.00 | 107 | 0.84 |
| 572 | 9.99 | 34.34 | 158 | 600 | 5.28 | 34.36 | 27.16 | 92 | 0.94 |
| 764 | 4.65 | 34.43 | 80 | 700 | 4.87 | 34.41 | 27.24 | 84 | 1.04 |
| 956 | 4.08 | 34.44 | 73 | 800 | 4.58 | 34.43 | 27.29 | 79 | 1.13 |
| 1158 | 3.44 | 34.51 | 62 | 1000 | 3.93 | 34.44 | 27.37 | 72 | 1.30 |

a) Overlapping casts; reconciliation of property curves when necessary.

S10

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5201

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

80.70 BLACK DOUGLAS; January 27, 1952; 0126 GCT; 33°49.5'N, 121°50'W; sounding, 2000 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 03°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.60 | 32.92 | 308 | 0 | 12.60 | 32.92 | 24.88 | 308 | 0.00 |
| 10 | 12.57 | 32.90 | 309 | 10 | 12.57 | 32.90 | 24.87 | 309 | 0.03 |
| 25 | 12.37 | 33.01 | 297 | 20 | 12.46 | 32.95 | 24.93 | 303 | 0.06 |
| 49 | 11.54 | 33.12 | 274 | 30 | 12.19 | 33.04 | 25.05 | 292 | 0.09 |
| 73 | 10.21 | 33.33 | 236 | 50 | 11.48 | 33.12 | 25.25 | 273 | 0.15 |
| 96 | 9.21 | 33.53 | 206 | 75 | 10.10 | 33.33 | 25.65 | 235 | 0.21 |
| 147 | 8.35 | 33.86 | 169 | 100 | 9.10 | 33.56 | 26.00 | 202 | 0.27 |
| 194 | 7.88 | 34.01 | 151 | 150 | 8.33 | 33.87 | 26.36 | 168 | 0.36 |
| 286 | 6.72 | 34.12 | 127 | 200 | 7.82 | 34.02 | 26.55 | 149 | 0.44 |
| 384 | 6.16 | 34.27 | 109 | 250 | 7.19 | 34.09 | 26.70 | 135 | 0.51 |
| 477 | 5.62 | 34.26 | 103 | 300 | 6.60 | 34.15 | 26.83 | 123 | 0.58 |
| 575 | 5.17 | 34.31 | 94 | 400 | 6.08 | 34.27 | 26.99 | 108 | 0.70 |
| 767 | 4.46 | 34.42 | 78 | 500 | 5.49 | 34.27 | 27.06 | 101 | 0.81 |
| 959 | 3.88 | 34.47 | 69 | 600 | 5.08 | 34.32 | 27.15 | 93 | 0.91 |
| 1160 | 3.36 | 34.51 | 61 | 700 | 4.72 | 34.38 | 27.24 | 84 | 1.01 |
| | | | | 800 | 4.33 | 34.43 | 27.32 | 76 | 1.10 |
| | | | | 1000 | 3.77 | 34.48 | 27.42 | 67 | 1.26 |

80.80 BLACK DOUGLAS; January 27, 1952; 0706 GCT; 33°29'N, 122°33'W; sounding, 2200 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 16°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.52 | 33.04 | 298 | 0 | 12.52 | 33.04 | 24.99 | 298 | 0.00 |
| 10 | 12.53 | 32.99 | 301 | 10 | 12.53 | 32.99 | 24.95 | 301 | 0.03 |
| 24 | 12.37 | 33.06 | 293 | 20 | 12.46 | 33.05 | 25.01 | 296 | 0.06 |
| 47 | 11.30 | 33.08 | 273 | 30 | 12.09 | 33.06 | 25.09 | 288 | 0.09 |
| 68 | 9.97 | 33.13 | 247 | 50 | 11.11 | 33.08 | 25.28 | 270 | 0.15 |
| 90 | 9.43 | 33.41 | 218 | 75 | 9.75 | 33.20 | 25.61 | 239 | 0.21 |
| 138 | 8.59 | 33.84 | 174 | 100 | 9.22 | 33.54 | 25.96 | 205 | 0.26 |
| 182 | 7.86 | 33.96 | 154 | 150 | 8.38 | 33.89 | 26.37 | 167 | 0.36 |
| 270 | 6.95 | 34.04 | 136 | 200 | 7.62 | 33.98 | 26.55 | 149 | 0.44 |
| 361 | 6.04 | 34.14 | 117 | 250 | 7.10 | 34.02 | 26.65 | 139 | 0.51 |
| 449 | 5.56 | 34.22 | 105 | 300 | 6.70 | 34.06 | 26.74 | 131 | 0.58 |
| 540 | 5.32 | 34.27 | 99 | 400 | 5.77 | 34.18 | 26.96 | 111 | 0.71 |
| 721 | 4.56 | 34.40 | 81 | 500 | 5.43 | 34.25 | 27.05 | 102 | 0.82 |
| 901 | 4.02 | 34.47 | 70 | 600 | 5.08 | 34.30 | 27.13 | 94 | 0.92 |
| 1097 | 3.50 | 34.49 | 64 | 700 | 4.63 | 34.38 | 27.25 | 83 | 1.02 |
| | | | | 800 | 4.30 | 34.44 | 27.33 | 75 | 1.11 |
| | | | | 1000 | 3.77 | 34.48 | 27.42 | 67 | 1.27 |

80.90 BLACK DOUGLAS; January 27, 1952; 1405 GCT; 33°08.5'N, 122°13'W; sounding, 2370 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 23°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.74 | 32.99 | 305 | 0 | 12.74 | 32.99 | 24.91 | 305 | 0.00 |
| 9 | 12.73 | 32.94 | 309 | 10 | 12.73 | 32.94 | 24.87 | 309 | 0.03 |
| 23 | 12.63 | 33.01 | 302 | 20 | 12.66 | 33.00 | 24.93 | 303 | 0.06 |
| 45 | 12.38 | 33.01 | 297 | 30 | 12.58 | 33.01 | 24.96 | 301 | 0.09 |
| 66 | 12.06 | 33.13 | 283 | 50 | 12.31 | 33.01 | 25.01 | 296 | 0.15 |
| 87 | 10.66 | 33.04 | 265 | 75 | 11.75 | 33.10 | 25.18 | 279 | 0.22 |
| 132 | 9.29 | 33.64 | 199 | 100 | 9.98 | 33.13 | 25.52 | 247 | 0.29 |
| 173 | 8.86 | 33.90 | 173 | 150 | 9.10 | 33.80 | 26.18 | 184 | 0.40 |
| 254 | 7.70 | 34.02 | 147 | 200 | 8.54 | 33.95 | 26.39 | 165 | 0.49 |
| 342 | 7.06 | 34.11 | 132 | 250 | 7.78 | 34.01 | 26.55 | 149 | 0.57 |
| 423 | 6.05 | 34.09 | 121 | 300 | 7.38 | 34.07 | 26.65 | 139 | 0.64 |
| 509 | 5.71 | 34.18 | 110 | 400 | 6.38 | 34.09 | 26.81 | 125 | 0.78 |
| 676 | 4.91 | 34.31 | 91 | 500 | 5.73 | 34.17 | 26.95 | 111 | 0.90 |
| 848 | 4.33 | 34.40 | 79 | 600 | 5.29 | 34.25 | 27.07 | 100 | 1.02 |
| 1044 | 3.80 | 34.42 | 72 | 700 | 4.82 | 34.33 | 27.19 | 89 | 1.12 |
| | | | | 800 | 4.48 | 34.38 | 27.26 | 82 | 1.21 |
| | | | | 1000 | 3.92 | 34.42 | 27.36 | 73 | 1.38 |

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

BLACK DOUGLAS; January 27, 1952; 1946 GCT; 32°47'N, 123°55'W; sounding, 2200 fm; wind, 020°, force 2; weather, partly cloudy; sea, rough; wire angle, 04°. 80.100

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.09 | 32.94 | 316 | 0 | 13.09 | 32.94 | 24.80 | 316 | 0.00 |
| 10 | 12.98 | 32.95 | 313 | 10 | 12.98 | 32.95 | 24.83 | 313 | 0.03 |
| 25 | 12.90 | 32.94 | 312 | 20 | 12.91 | 32.94 | 24.84 | 312 | 0.06 |
| 49 | 12.81 | 32.97 | 308 | 30 | 12.90 | 32.94 | 24.84 | 312 | 0.09 |
| 72 | 12.55 | 32.99 | 302 | 50 | 12.80 | 32.97 | 24.88 | 308 | 0.16 |
| 96 | 10.16 | 32.97 | 262 | 75 | 12.45 | 32.99 | 24.97 | 300 | 0.23 |
| 147 | 9.00 | 33.49 | 206 | 100 | 9.87 | 32.97 | 25.41 | 258 | 0.30 |
| 194 | 8.76 | 33.93 | 169 | 150 | 8.99 | 33.52 | 25.98 | 203 | 0.42 |
| 287 | 7.58 | 34.22 | 131 | 200 | 8.71 | 33.98 | 26.39 | 165 | 0.51 |
| 384 | 6.61 | 34.16 | 123 | 250 | 8.17 | 34.19 | 26.63 | 141 | 0.59 |
| 479 | 5.88 | 34.20 | 111 | 300 | 7.40 | 34.21 | 26.76 | 129 | 0.66 |
| 577 | 5.11 | 34.23 | 100 | 400 | 6.50 | 34.17 | 26.85 | 121 | 0.79 |
| 769 | 4.60 | 34.34 | 86 | 500 | 5.70 | 34.21 | 26.99 | 108 | 0.91 |
| 959 | 3.98 | 34.45 | 71 | 600 | 5.01 | 34.24 | 27.09 | 98 | 1.02 |
| 1160 | 3.38 | 34.52 | 60 | 700 | 4.78 | 34.30 | 27.17 | 91 | 1.12 |
| | | | | 800 | 4.50 | 34.36 | 27.25 | 83 | 1.22 |
| | | | | 1000 | 3.85 | 34.47 | 27.40 | 69 | 1.39 |

BLACK DOUGLAS; January 27, 1952; 2110 GCT;[a] 32°47'N, 123°55'W; sounding, 2200 fm; wind, 020°, force 2; weather, partly cloudy; sea, rough; wire angle, 03°. 80.100

| | | | |
|---|---|---|---|
| 948 | 3.96 | 34.43 | 73 |
| 950 | 3.97 | 34.40 | 75 |
| 952 | 3.93 | 34.49 | 68 |
| 954 | 3.94 | 34.40 | 75 |
| 956 | 3.95 | 34.45 | 71 |
| 958 | 3.92 | 34.47 | 69 |
| 960 | 3.92 | 34.45 | 71 |
| 962 | 3.92 | 34.43 | 72 |
| 964 | 3.92 | 34.47 | 69 |
| 966 | 3.90 | 34.45 | 71 |
| 968 | 3.90 | 34.40 | 74 |
| 970 | - | 34.42 | |
| 972 | 3.88 | 34.40 | 74 |
| 974 | 3.86 | 34.40 | 74 |
| 976 | 3.85 | 34.47 | 69 |

BLACK DOUGLAS; January 28, 1952; 0248 GCT; 32°24'N, 124°39'W; sounding, 2420 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 04°. 80.110

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.47 | 33.08 | 332 | 0 | 14.47 | 33.08 | 24.63 | 332 | 0.00 |
| 10 | 14.44 | 33.01 | 337 | 10 | 14.44 | 33.01 | 24.58 | 337 | 0.03 |
| 25 | 14.35 | 33.06 | 331 | 20 | 14.38 | 33.04 | 24.62 | 333 | 0.07 |
| 49 | 14.27 | 33.08 | 328 | 30 | 14.32 | 33.06 | 24.64 | 331 | 0.10 |
| 72 | 14.32 | 33.10 | 328 | 50 | 14.27 | 33.08 | 24.67 | 328 | 0.17 |
| 96 | 10.06 | 32.90 | 266 | 75 | 14.31 | 33.10 | 24.68 | 327 | 0.25 |
| 147 | 8.99 | 33.53 | 202 | 100 | 9.89 | 32.90 | 25.35 | 263 | 0.32 |
| 194 | 8.33 | 33.86 | 168 | 150 | 8.92 | 33.56 | 26.03 | 199 | 0.44 |
| 288 | 7.11 | 34.04 | 138 | 200 | 8.26 | 33.88 | 26.38 | 166 | 0.53 |
| 387 | 6.24 | 34.09 | 123 | 250 | 7.59 | 34.00 | 26.57 | 147 | 0.61 |
| 481 | 5.54 | 34.16 | 110 | 300 | 7.00 | 34.05 | 26.69 | 136 | 0.69 |
| 580 | 5.14 | 34.25 | 98 | 400 | 6.12 | 34.10 | 26.85 | 121 | 0.82 |
| 772 | 4.58 | 34.38 | 83 | 500 | 5.45 | 34.18 | 26.99 | 107 | 0.94 |
| 961 | 3.98 | 34.47 | 70 | 600 | 5.10 | 34.27 | 27.11 | 97 | 1.05 |
| 1160 | 3.44 | 34.52 | 61 | 700 | 4.82 | 34.34 | 27.19 | 88 | 1.15 |
| | | | | 800 | 4.48 | 34.40 | 27.28 | 80 | 1.24 |
| | | | | 1000 | 3.88 | 34.48 | 27.41 | 68 | 1.40 |

a) Test cast.

SIO

CCOFI
5201

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

85.38 BLACK DOUGLAS; January 26, 1952; 0302 GCT; 34°01.5'N, 119°03'W; sounding, 120 fm; wind, calm; weather, clear; sea, slight; wire angle, 00°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.76 | 33.21 | 309 | 0 | 13.76 | 33.21 | 24.88 | 309 | 0.00 |
| 10 | 13.68 | 33.30 | 300 | 10 | 13.68 | 33.30 | 24.96 | 300 | 0.03 |
| 20 | 13.65 | 33.24 | 304 | 20 | 13.65 | 33.24 | 24.92 | 304 | 0.06 |
| 30 | 13.56 | 33.15 | 309 | 30 | 13.56 | 33.15 | 24.87 | 309 | 0.09 |
| 48 | 13.18 | 33.28 | 292 | 50 | (13.11) | (33.33) | (25.10) | (287) | (0.15) |

85.40 BLACK DOUGLAS; January 26, 1952; 0102 GCT; 33°57'N, 119°10.5'W; sounding, 420 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.94 | 33.13 | 318 | 0 | 13.94 | 33.13 | 24.78 | 318 | 0.00 |
| 10 | 13.80 | 33.28 | 304 | 10 | 13.80 | 33.28 | 24.92 | 304 | 0.03 |
| 25 | 13.79 | 33.26 | 305 | 20 | 13.79 | 33.27 | 24.92 | 305 | 0.06 |
| 50 | 13.62 | 33.24 | 304 | 30 | 13.78 | 33.26 | 24.91 | 305 | 0.09 |
| 74 | 11.38 | 33.26 | 261 | 50 | 13.62 | 33.24 | 24.93 | 304 | 0.15 |
| 98 | 10.02 | - | | 75 | 11.26 | 33.26 | 25.40 | 259 | 0.22 |
| 149 | 9.17 | 33.80 | 185 | 100 | 9.96 | 33.43 | 25.75 | 225 | 0.28 |
| 196 | 8.69 | 34.07 | 158 | 150 | 9.15 | 33.80 | 26.18 | 185 | 0.39 |
| 242 | 8.27 | 34.13 | 147 | 200 | 8.63 | 34.08 | 26.48 | 156 | 0.48 |
| 289 | 8.00 | 34.20 | 138 | 250 | 8.21 | 34.14 | 26.59 | 146 | 0.55 |
| 340 | 7.56 | 34.23 | 130 | 300 | 7.95 | 34.21 | 26.68 | 137 | 0.63 |
| 387 | 7.11 | 34.23 | 124 | 400 | 7.00 | 34.24 | 26.84 | 122 | 0.76 |
| 434 | 6.77 | 34.27 | 116 | 500 | 6.42 | | | | |
| 481 | 6.52 | 34.27 | 113 | 600 | (5.69) | | | | |
| 584 | 5.82 | 34.42 | 94 | | | | | | |

85.50 BLACK DOUGLAS; January 25, 1952; 1920 GCT; 33°36.5'N, 119°53.5'W; sounding, 200 fm; wind, 210°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.31 | 33.24 | 298 | 0 | 13.31 | 33.24 | 24.99 | 298 | 0.00 |
| 10 | 13.22 | 33.22 | 297 | 10 | 13.22 | 33.22 | 24.99 | 297 | 0.03 |
| 25 | 12.98 | 33.28 | 288 | 20 | 13.07 | 33.26 | 25.05 | 292 | 0.06 |
| 49 | 10.87 | 33.35 | 246 | 30 | 12.88 | 33.29 | 25.11 | 286 | 0.09 |
| 73 | 9.84 | 33.55 | 214 | 50 | 10.57 | 33.36 | 25.60 | 240 | 0.14 |
| 96 | 9.42 | 33.69 | 197 | 75 | 9.80 | 33.57 | 25.89 | 212 | 0.20 |
| 119 | 9.12 | 33.68 | 193 | 100 | 9.38 | 33.69 | 26.05 | 197 | 0.25 |
| 148 | 8.66 | 34.02 | 161 | 150 | (8.60) | (34.05) | (26.46) | (158) | (0.34) |

85.60 BLACK DOUGLAS; January 25, 1952; 1352 GCT; 33°17'N, 120°33'W; sounding, 700 fm; wind, 190°, force 1; weather, drizzle; sea, rough; wire angle, 15°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.92 | 33.28 | 287 | 0 | 12.92 | 33.28 | 25.10 | 287 | 0.00 |
| 10 | 12.91 | 33.31 | 285 | 10 | 12.91 | 33.31 | 25.12 | 285 | 0.03 |
| 24 | 12.89 | 33.28 | 287 | 20 | 12.90 | 33.28 | 25.10 | 287 | 0.06 |
| 47 | 12.66 | 33.30 | 281 | 30 | 12.85 | 33.28 | 25.11 | 286 | 0.09 |
| 69 | 11.00 | 33.37 | 246 | 50 | 12.56 | 33.30 | 25.18 | 279 | 0.14 |
| 92 | 9.86 | 33.62 | 209 | 75 | 10.50 | 33.41 | 25.65 | 235 | 0.21 |
| 141 | 8.90 | 33.93 | 171 | 100 | 9.64 | 33.73 | 26.04 | 198 | 0.26 |
| 186 | 8.41 | 34.00 | 159 | 150 | 8.79 | 33.94 | 26.34 | 169 | 0.35 |
| 275 | 7.58 | 34.16 | 135 | 200 | 8.30 | 34.02 | 26.48 | 156 | 0.44 |
| 368 | 6.92 | 34.22 | 122 | 250 | 7.84 | 34.12 | 26.63 | 142 | 0.51 |
| 457 | 6.19 | 34.27 | 109 | 300 | 7.38 | 34.18 | 26.74 | 131 | 0.58 |
| 552 | 5.58 | 34.34 | 97 | 400 | 6.70 | 34.24 | 26.88 | 118 | 0.71 |
| 642 | 5.16 | 34.38 | 89 | 500 | 5.85 | 34.30 | 27.04 | 103 | 0.83 |
| 738 | 4.81 | 34.42 | 82 | 600 | 5.35 | 34.36 | 27.15 | 93 | 0.94 |
| 930 | 4.13 | 34.45 | 73 | 700 | 4.95 | 34.40 | 27.23 | 85 | 1.03 |
| | | | | 800 | 4.58 | 34.44 | 27.30 | 78 | 1.12 |
| | | | | 1000 | (3.93) | (34.45) | (27.38) | (71) | (1.29) |

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

BLACK DOUGLAS; January 25, 1952; 0811 GCT; 32°57'N, 121°14'W; sounding, 2200 fm; wind, 190°, force 3; weather, drizzle; sea, moderate; wire angle, 24°. 85.70

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.33 | | 0 | 13.0 | 33.33 | 25.12 | 285 | 0.00 |
| 9 | 13.00 | 33.35 | 284 | 10 | 13.00 | 33.35 | 25.14 | 284 | 0.03 |
| 23 | 13.00 | 33.30 | 287 | 20 | 13.00 | 33.30 | 25.10 | 287 | 0.06 |
| 48 | 12.96 | 33.30 | 287 | 30 | 13.00 | 33.30 | 25.10 | 287 | 0.09 |
| 68 | 10.88 | 33.30 | 250 | 50 | 12.94 | 33.30 | 25.11 | 286 | 0.14 |
| 92 | 9.60 | 33.60 | 207 | 75 | 10.34 | 33.31 | 25.60 | 240 | 0.21 |
| 136 | 8.79 | 33.86 | 175 | 100 | 9.43 | 33.67 | 26.03 | 199 | 0.26 |
| 181 | 8.25 | 33.98 | 158 | 150 | 8.61 | 33.90 | 26.34 | 169 | 0.36 |
| 270 | 7.63 | 34.15 | 137 | 200 | 8.11 | 34.02 | 26.51 | 153 | 0.44 |
| 363 | 6.67 | 34.22 | 119 | 250 | 7.76 | 34.12 | 26.64 | 141 | 0.52 |
| 452 | 5.99 | 34.25 | 108 | 300 | 7.37 | 34.18 | 26.74 | 131 | 0.59 |
| 542 | - | 34.33 | | 400 | 6.37 | 34.24 | 26.93 | 114 | 0.71 |
| 725 | 4.72 | 34.47 | 77 | 500 | (5.72) | 34.28 | (27.04) | (103) | (0.83) |
| 913 | 4.08 | 34.49 | 69 | 600 | (5.24) | 34.40 | (27.19) | (88) | (0.93) |
| 1107 | 3.60 | 34.49 | 65 | 700 | (4.82) | 34.46 | (27.29) | (79) | (1.02) |
| | | | | 800 | 4.44 | 34.48 | 27.35 | 74 | (1.11) |
| | | | | 1000 | 3.86 | 34.49 | 27.42 | 67 | (1.26) |

BLACK DOUGLAS; January 22, 1952; 2258 GCT; 33°28.5'N, 117°46.5'W; sounding, 220 fm; wind, 260°, force 1; weather, partly cloudy; sea, slight; wire angle, 01°. 90.28

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.20 | 32.99 | 333 | 0 | 14.20 | 32.99 | 24.61 | 333 | 0.00 |
| 10 | 13.87 | 33.04 | 323 | 10 | 13.87 | 33.04 | 24.72 | 323 | 0.03 |
| 25 | 13.90 | 33.29 | 305 | 20 | 13.90 | 33.28 | 24.90 | 306 | 0.06 |
| 49 | 13.60 | 33.28 | 300 | 30 | 13.88 | 33.29 | 24.91 | 305 | 0.09 |
| 73 | 11.84 | 33.19 | 274 | 50 | 13.52 | 33.28 | 24.98 | 299 | 0.16 |
| 96 | 10.51 | 33.41 | 235 | 75 | 11.59 | 33.19 | 25.28 | 270 | 0.23 |
| 147 | 9.80 | 34.04 | 177 | 100 | 10.41 | 33.52 | 25.75 | 226 | 0.29 |
| 194 | 9.16 | 34.09 | 164 | 150 | 9.77 | 34.04 | 26.26 | 177 | 0.39 |
| 242 | 8.50 | 34.16 | 148 | 200 | 9.08 | 34.10 | 26.42 | 162 | 0.48 |
| | | | | 250 | (8.41) | (34.17) | (26.58) | (146) | (0.56) |

BLACK DOUGLAS; January 23, 1952; 0130 GCT; 33°24'N, 117°55'W; sounding, 330 fm; wind, 260°, force 1; weather, cloudy; sea, slight; wire angle, 02°. 90.30

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.08 | 33.22 | 314 | 0 | 14.08 | 33.22 | 24.82 | 314 | 0.00 |
| 10 | 13.83 | 33.24 | 308 | 10 | 13.83 | 33.24 | 24.88 | 308 | 0.03 |
| 25 | 13.74 | 33.33 | 299 | 20 | 13.78 | 33.30 | 24.94 | 302 | 0.06 |
| 50 | 13.64 | 33.39 | 293 | 30 | 13.72 | 33.36 | 25.00 | 297 | 0.09 |
| 74 | 11.98 | 33.39 | 262 | 50 | 13.64 | 33.39 | 25.04 | 293 | 0.15 |
| 98 | 10.38 | 33.46 | 229 | 75 | 11.98 | 33.39 | 25.36 | 262 | 0.22 |
| 149 | 9.13 | 33.84 | 182 | 100 | 10.27 | 33.47 | 25.73 | 227 | 0.28 |
| 195 | 8.98 | 34.23 | 150 | 150 | 9.12 | 33.86 | 26.23 | 180 | 0.39 |
| 240 | 8.38 | 34.20 | 144 | 200 | 8.93 | 34.23 | 26.55 | 150 | 0.47 |
| 287 | 7.81 | 34.22 | 134 | 250 | 8.24 | 34.20 | 26.63 | 142 | 0.54 |
| 337 | 7.42 | 34.29 | 124 | 300 | 7.70 | 34.23 | 26.73 | 132 | 0.61 |
| 384 | 7.06 | 34.29 | 119 | 400 | 6.98 | 34.29 | 26.88 | 118 | 0.75 |
| 434 | 6.76 | 34.29 | 115 | | | | | | |

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| 90.37 | BLACK DOUGLAS; January 23, 1952; 0535 GCT; 33°11'N, 118°24'W; sounding, 600 fm; wind, 270°, force 1; weather, partly cloudy; sea, slight; wire angle, 04°. | | | | | | | | |
| 0 | 14.03 | 33.30 | 307 | 0 | 14.03 | 33.30 | 24.89 | 307 | 0.00 |
| 10 | 13.99 | 33.28 | 308 | 10 | 13.99 | 33.28 | 24.88 | 308 | 0.03 |
| 25 | 13.94 | 33.30 | 305 | 20 | 13.94 | 33.29 | 24.90 | 306 | 0.06 |
| 50 | 13.66 | 33.30 | 300 | 30 | 13.90 | 33.30 | 24.92 | 305 | 0.09 |
| 74 | 11.25 | 33.19 | 264 | 50 | 13.66 | 33.30 | 24.96 | 300 | 0.15 |
| 98 | 10.58 | 33.42 | 236 | 75 | 11.25 | 33.19 | 25.34 | 264 | 0.22 |
| 149 | 9.55 | 33.84 | 188 | 100 | 10.52 | 33.45 | 25.67 | 233 | 0.29 |
| 195 | 8.92 | 34.02 | 165 | 150 | 9.52 | 33.84 | 26.15 | 188 | 0.39 |
| 288 | 7.81 | 34.16 | 139 | 200 | 8.85 | 34.03 | 26.40 | 163 | 0.48 |
| 384 | 7.04 | 34.25 | 121 | 250 | 8.29 | 34.12 | 26.56 | 148 | 0.56 |
| 476 | 6.38 | 34.27 | 112 | 300 | 7.69 | 34.17 | 26.69 | 136 | 0.64 |
| 574 | 5.80 | 34.31 | 102 | 400 | 6.99 | 34.25 | 26.85 | 121 | 0.77 |
| 668 | 5.36 | 34.36 | 93 | 500 | 6.23 | 34.28 | 26.98 | 109 | 0.89 |
| 768 | 4.91 | 34.40 | 85 | 600 | 5.70 | 34.32 | 27.07 | 100 | 1.00 |
| 867 | 4.42 | 34.43 | 77 | 700 | 5.22 | 34.37 | 27.17 | 90 | 1.10 |
| | | | | 800 | 4.76 | 34.41 | 27.26 | 82 | 1.20 |
| | | | | 1000 | (3.77) | (34.46) | (27.40) | (69) | (1.37) |
| 90.37 | BLACK DOUGLAS; January 23, 1952; 0657 GCT;[a] 33°11'N, 118°24'W; sounding, 600 fm; wind, 270°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | |
| 0 | 13.96 | 33.29 | 307 | | | | | | |
| 10 | 13.95 | 33.28 | 307 | | | | | | |
| 20 | 13.94 | 33.31 | 305 | | | | | | |
| 30 | 13.76 | 33.28 | 303 | | | | | | |
| 49 | 13.54 | 33.26 | 301 | | | | | | |
| 68 | 11.83 | 33.19 | 274 | | | | | | |
| 87 | 10.44 | 33.28 | 244 | | | | | | |
| 105 | 9.86 | 33.51 | 217 | | | | | | |
| 114 | 9.78 | 33.49 | 218 | | | | | | |
| 124 | 9.77 | 33.64 | 206 | | | | | | |
| 128 | 9.77 | 33.71 | 201 | | | | | | |
| 132 | 9.71 | 33.78 | 195 | | | | | | |
| 187 | 8.93 | 34.04 | 164 | | | | | | |
| 234 | 8.26 | 34.07 | 152 | | | | | | |
| 282 | 7.85 | 34.09 | 144 | | | | | | |
| 90.45 | BLACK DOUGLAS; January 23, 1952; 1149 GCT; 32°54.5'N, 118°56'W; sounding, 910 fm; wind, calm; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | |
| 0 | 13.82 | 33.26 | 306 | 0 | 13.82 | 33.26 | 24.90 | 306 | 0.00 |
| 10 | 13.83 | 33.30 | 303 | 10 | 13.83 | 33.30 | 24.93 | 303 | 0.03 |
| 25 | 13.86 | 33.30 | 304 | 20 | 13.83 | 33.30 | 24.93 | 303 | 0.06 |
| 49 | 13.26 | 33.26 | 295 | 30 | 13.82 | 33.29 | 24.92 | 304 | 0.09 |
| 73 | 11.06 | 33.26 | 256 | 50 | 13.11 | 33.26 | 25.04 | 292 | 0.15 |
| 97 | 9.61 | 33.44 | 219 | 75 | 11.00 | 33.26 | 25.44 | 255 | 0.22 |
| 149 | 9.19 | 33.86 | 181 | 100 | 9.52 | 33.47 | 25.86 | 215 | 0.28 |
| 196 | 8.88 | 34.02 | 164 | 150 | 9.19 | 33.87 | 26.22 | 180 | 0.38 |
| 291 | 7.63 | 34.13 | 138 | 200 | 8.87 | 34.03 | 26.40 | 164 | 0.47 |
| 389 | 7.09 | 34.22 | 124 | 250 | 8.31 | 34.10 | 26.54 | 150 | 0.55 |
| 485 | 6.34 | 34.27 | 111 | 300 | 7.60 | 34.14 | 26.68 | 137 | 0.62 |
| 583 | 5.71 | 34.31 | 100 | 400 | 7.03 | 34.23 | 26.83 | 123 | 0.76 |
| 779 | 4.79 | 34.42 | 82 | 500 | 6.26 | 34.28 | 26.97 | 109 | 0.88 |
| 970 | 4.09 | 34.49 | 69 | 600 | 5.64 | 34.32 | 27.08 | 99 | 0.99 |
| 1170 | 3.88 | 34.47 | 69 | 700 | 5.18 | 34.37 | 27.18 | 90 | 1.09 |
| | | | | 800 | 4.70 | 34.43 | 27.28 | 80 | 1.19 |
| | | | | 1000 | 4.00 | 34.49 | 27.40 | 69 | 1.35 |

a) Bathythermograph calibration cast.

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

BLACK DOUGLAS; January 23, 1952; 1658 GCT; 32°38.5'N, 119°29'W; sounding, 700 fm; 90.53
wind, 140°, force 1; weather, cloudy; sea, slight; wire angle, 03°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.17 | 33.19 | 318 | 0 | 14.17 | 33.19 | 24.77 | 318 | 0.00 |
| 10 | 14.17 | 33.22 | 316 | 10 | 14.17 | 33.22 | 24.80 | 316 | 0.03 |
| 25 | 14.20 | 33.19 | 319 | 20 | 14.19 | 33.20 | 24.78 | 318 | 0.06 |
| 48 | 13.58 | 33.17 | 308 | 30 | 14.17 | 33.18 | 24.77 | 319 | 0.10 |
| 72 | 11.13 | 32.99 | 277 | 50 | 13.41 | 33.16 | 24.91 | 305 | 0.16 |
| 95 | 10.44 | 33.14 | 254 | 75 | 11.07 | 32.99 | 25.22 | 276 | 0.23 |
| 145 | 9.12 | 33.77 | 187 | 100 | 10.33 | 33.19 | 25.51 | 249 | 0.30 |
| 192 | 8.38 | 33.96 | 162 | 150 | 9.04 | 33.81 | 26.20 | 182 | 0.41 |
| 285 | 7.36 | 34.13 | 135 | 200 | 8.30 | 33.98 | 26.45 | 159 | 0.49 |
| 384 | 6.70 | 34.23 | 119 | 250 | 7.71 | 34.08 | 26.62 | 143 | 0.57 |
| 478 | 6.15 | 34.30 | 106 | 300 | 7.25 | 34.15 | 26.74 | 132 | 0.64 |
| 577 | 5.65 | 34.31 | 100 | 400 | 6.61 | 34.25 | 26.90 | 116 | 0.77 |
| 672 | 5.20 | 34.38 | 89 | 500 | 6.03 | 34.30 | 27.02 | 105 | 0.89 |
| 772 | 4.76 | 34.52 | 74 | 600 | 5.54 | 34.31 | 27.09 | 98 | 1.00 |
| 968 | 4.02 | 34.52 | 66 | 700 | 5.09 | 34.43 | 27.23 | 84 | 1.09 |
| | | | | 800 | 4.65 | 34.52 | 27.36 | 73 | 1.18 |
| | | | | 1000 | (3.93) | (34.52) | (27.43) | (66) | (1.34) |

BLACK DOUGLAS; January 23, 1952; 2120 GCT; 32°26'N, 119°57.5'W; sounding, 550 fm; 90.60
wind, 160°, force 1; weather, cloudy; sea, moderate; wire angle, 06°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.31 | 33.26 | 316 | 0 | 14.31 | 33.26 | 24.80 | 316 | 0.00 |
| 10 | 14.17 | 33.26 | 313 | 10 | 14.17 | 33.26 | 24.83 | 313 | 0.03 |
| 25 | 14.00 | 33.19 | 315 | 20 | 14.07 | 33.20 | 24.80 | 315 | 0.06 |
| 50 | 13.88 | 33.26 | 307 | 30 | 13.99 | 33.20 | 24.82 | 314 | 0.09 |
| 74 | 11.04 | 33.10 | 267 | 50 | 13.88 | 33.26 | 24.89 | 307 | 0.16 |
| 98 | 9.55 | 33.31 | 227 | 75 | 10.98 | 33.10 | 25.32 | 266 | 0.23 |
| 150 | 8.98 | 33.80 | 182 | 100 | 9.50 | 33.32 | 25.74 | 226 | 0.29 |
| 195 | 8.61 | 34.07 | 157 | 150 | 8.98 | 33.80 | 26.20 | 182 | 0.39 |
| 241 | 8.12 | 34.09 | 148 | 200 | 8.58 | 34.07 | 26.48 | 156 | 0.48 |
| 286 | 7.60 | 34.13 | 138 | 250 | 8.02 | 34.10 | 26.59 | 146 | 0.56 |
| 336 | 7.08 | 34.21 | 125 | 300 | 7.46 | 34.16 | 26.71 | 134 | 0.63 |
| 382 | 6.61 | 34.20 | 120 | 400 | 6.50 | 34.21 | 26.89 | 118 | 0.76 |
| 476 | 6.06 | 34.27 | 108 | 500 | 5.92 | 34.28 | 27.02 | 105 | 0.88 |
| 576 | 5.36 | 34.31 | 96 | 600 | 5.23 | 34.32 | 27.13 | 94 | 0.98 |
| 675 | 5.00 | 34.34 | 90 | 700 | (4.94) | (34.35) | (27.19) | (89) | (1.08) |

BLACK DOUGLAS; January 24, 1952; 0345 GCT; 32°04.5'N, 120°39'W; sounding, 2100 fm; 90.70
wind, calm; weather, overcast; sea, slight; wire angle, 00°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.81 | 33.17 | 312 | 0 | 13.81 | 33.17 | 24.83 | 312 | 0.00 |
| 10 | 13.61 | 33.19 | 307 | 10 | 13.61 | 33.19 | 24.89 | 307 | 0.03 |
| 25 | 13.45 | 33.26 | 299 | 20 | 13.50 | 33.25 | 24.96 | 301 | 0.06 |
| 49 | 13.37 | 33.26 | 297 | 30 | 13.44 | 33.26 | 24.98 | 299 | 0.09 |
| 72 | 13.04 | 33.24 | 293 | 50 | 13.35 | 33.26 | 25.00 | 297 | 0.15 |
| 95 | 10.30 | 33.17 | 250 | 75 | 13.00 | 33.24 | 25.05 | 292 | 0.23 |
| 147 | 8.77 | 33.66 | 190 | 100 | 10.00 | 33.17 | 25.55 | 245 | 0.29 |
| 194 | 8.29 | 33.95 | 161 | 150 | 8.71 | 33.69 | 26.16 | 186 | 0.40 |
| 288 | 7.75 | 34.14 | 139 | 200 | 8.25 | 33.97 | 26.45 | 159 | 0.49 |
| 386 | 6.40 | 34.13 | 122 | 250 | 7.99 | 34.10 | 26.59 | 146 | 0.57 |
| 481 | 5.94 | 34.19 | 112 | 300 | 7.66 | 34.14 | 26.67 | 138 | 0.64 |
| 580 | 5.40 | 34.30 | 98 | 400 | 6.30 | 34.13 | 26.85 | 121 | 0.78 |
| 773 | 4.62 | 34.40 | 82 | 500 | 5.88 | 34.22 | 26.97 | 109 | 0.90 |
| 963 | 4.04 | 34.44 | 73 | 600 | 5.30 | 34.32 | 27.12 | 95 | 1.01 |
| 1165 | 3.50 | 34.51 | 62 | 700 | 4.89 | 34.37 | 27.21 | 87 | 1.10 |
| | | | | 800 | 4.54 | 34.41 | 27.28 | 80 | 1.19 |
| | | | | 1000 | 3.95 | 34.45 | 27.38 | 71 | 1.36 |

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| 90.80 | BLACK DOUGLAS; January 24, 1952; 0946 GCT; 31°45'N, 121°19'W; sounding, 2180 fm; wind, 230°, force 2; weather, overcast; sea, slight; wire angle, 06°. | | | | | | | | |
| 0 | 14.86 | 33.22 | 330 | 0 | 14.86 | 33.22 | 24.65 | 330 | 0.00 |
| 10 | 14.84 | 33.19 | 332 | 10 | 14.84 | 33.19 | 24.63 | 332 | 0.03 |
| 25 | 14.86 | 33.22 | 330 | 20 | 14.85 | 33.21 | 24.65 | 330 | 0.07 |
| 48 | 14.85 | 33.19 | 332 | 30 | 14.85 | 33.22 | 24.65 | 330 | 0.10 |
| 72 | 14.86 | 33.21 | 331 | 50 | 14.84 | 33.19 | 24.63 | 332 | 0.17 |
| 94 | 14.80 | 33.24 | 327 | 75 | 14.85 | 33.22 | 24.65 | 330 | 0.25 |
| 145 | 9.90 | 33.31 | 233 | 100 | 14.72 | 33.25 | 24.70 | 325 | 0.33 |
| 191 | 8.88 | 33.66 | 191 | 150 | 9.71 | 33.33 | 25.72 | 228 | 0.47 |
| 283 | 7.61 | 34.04 | 145 | 200 | 8.78 | 33.76 | 26.20 | 182 | 0.58 |
| 380 | 6.62 | 34.11 | 127 | 250 | 8.11 | 33.99 | 26.49 | 155 | 0.66 |
| 472 | 6.08 | 34.20 | 113 | 300 | 7.41 | 34.05 | 26.63 | 141 | 0.74 |
| 568 | 5.48 | 34.31 | 98 | 400 | 6.48 | 34.13 | 26.83 | 123 | 0.88 |
| 758 | 4.62 | 34.40 | 82 | 500 | 5.94 | 34.24 | 26.98 | 108 | 1.00 |
| 947 | 4.08 | 34.52 | 67 | 600 | 5.29 | 34.34 | 27.14 | 93 | 1.10 |
| 1147 | 3.50 | 34.52 | 61 | 700 | 4.82 | 34.38 | 27.23 | 85 | 1.20 |
| | | | | 800 | 4.49 | 34.42 | 27.29 | 79 | 1.29 |
| | | | | 1000 | 3.93 | 34.52 | 27.43 | 66 | 1.45 |
| 90.90 | BLACK DOUGLAS; January 24, 1952; 1721 GCT; 31°25.5'N, 121°58'W; sounding, 2000 fm; wind, 190°, force 3; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | |
| 0 | 15.44 | 33.36 | 332 | 0 | 15.44 | 33.36 | 24.63 | 332 | 0.00 |
| 10 | 15.42 | 33.37 | 330 | 10 | 15.42 | 33.37 | 24.64 | 330 | 0.03 |
| 24 | 15.45 | 33.37 | 331 | 20 | 15.44 | 33.37 | 24.64 | 331 | 0.07 |
| 47 | 15.46 | 33.32 | 335 | 30 | 15.46 | 33.36 | 24.63 | 332 | 0.10 |
| 70 | 15.43 | 33.36 | 331 | 50 | 15.45 | 33.32 | 24.60 | 335 | 0.17 |
| 93 | 13.68 | 33.24 | 305 | 75 | 15.39 | 33.35 | 24.64 | 331 | 0.25 |
| 144 | 9.97 | 33.26 | 238 | 100 | 12.81 | 33.24 | 25.09 | 288 | 0.33 |
| 190 | 8.90 | 33.68 | 190 | 150 | 9.80 | 33.29 | 25.67 | 233 | 0.46 |
| 283 | 7.45 | 34.01 | 145 | 200 | 8.74 | 33.76 | 26.21 | 182 | 0.56 |
| 379 | 6.40 | 34.08 | 126 | 250 | 7.92 | 33.96 | 26.49 | 155 | 0.65 |
| 471 | 5.73 | 34.18 | 110 | 300 | 7.22 | 34.02 | 26.64 | 141 | 0.73 |
| 567 | 5.36 | 34.29 | 98 | 400 | 6.23 | 34.10 | 26.83 | 122 | 0.86 |
| 756 | 4.56 | 34.39 | 82 | 500 | 5.60 | 34.21 | 27.00 | 107 | 0.98 |
| 942 | 4.02 | 34.44 | 72 | 600 | 5.25 | 34.31 | 27.12 | 95 | 1.09 |
| 1143 | 3.51 | 34.51 | 62 | 700 | 4.83 | 34.37 | 27.22 | 86 | 1.19 |
| | | | | 800 | 4.40 | 34.40 | 27.29 | 79 | 1.28 |
| | | | | 1000 | 3.90 | 34.45 | 27.38 | 71 | 1.45 |
| 90.90 | BLACK DOUGLAS; January 24, 1952; 1850 GCT;[a] 31°25.5'N, 121°58'W; sounding, 2000 fm; wind, 190°, force 3; weather, overcast; sea, moderate; wire angle, 14°. | | | | | | | | |
| 917 | 4.14 | 34.41 | 76 | | | | | | |
| 919 | 4.10 | 34.45 | 73 | | | | | | |
| 921 | 4.08 | 34.47 | 71 | | | | | | |
| 923 | 4.06 | 34.43 | 74 | | | | | | |
| 925 | 4.06 | 34.43 | 74 | | | | | | |
| 927 | 4.06 | 34.46 | 71 | | | | | | |
| 929 | 4.06 | 34.43 | 74 | | | | | | |
| 931 | 4.06 | 34.45 | 72 | | | | | | |
| 933 | 4.07 | 34.43 | 74 | | | | | | |
| 935 | 4.03 | 34.43 | 73 | | | | | | |
| 937 | 4.04 | 34.47 | 70 | | | | | | |
| 939 | 4.04 | 34.36 | 79 | | | | | | |
| 941 | 4.03 | 34.45 | 72 | | | | | | |
| 943 | 4.04 | 34.39 | 76 | | | | | | |
| 945 | 4.02 | 34.45 | 72 | | | | | | |

a) Test cast.

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

BLACK DOUGLAS; January 22, 1952; 1750 GCT; 32°56'N, 117°19.5'W; sounding, 150 fm; wind, 360°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. 93.27

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.91 | 33.26 | 308 | 0 | 13.91 | 33.26 | 24.88 | 308 | 0.00 |
| 10 | 13.91 | 33.15 | 316 | 10 | 13.91 | 33.15 | 24.80 | 316 | 0.03 |
| 20 | 14.14 | 33.26 | 312 | 20 | 14.14 | 33.26 | 24.84 | 312 | 0.06 |
| 30 | 14.03 | 33.35 | 304 | 30 | 14.03 | 33.35 | 24.93 | 304 | 0.09 |
| 49 | 13.58 | 33.37 | 293 | 50 | 13.54 | 33.37 | 25.04 | 293 | 0.15 |
| 73 | 10.98 | 33.35 | 248 | 75 | 10.91 | 33.35 | 25.53 | 246 | 0.22 |
| 97 | 10.62 | 33.62 | 222 | 100 | 10.60 | 33.66 | 25.82 | 218 | 0.28 |
| 121 | 9.90 | 33.93 | 187 | | | | | | |

BLACK DOUGLAS; January 22, 1952; 1356 GCT; 32°50'N, 117°31.5'W; sounding, 430 fm; wind, 360°, force 1; weather, clear; sea, moderate; wire angle, 00°. 93.30

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.90 | 33.24 | 309 | 0 | 13.90 | 33.24 | 24.87 | 309 | 0.00 |
| 10 | 13.95 | 33.28 | 307 | 10 | 13.95 | 33.28 | 24.89 | 307 | 0.03 |
| 25 | 13.92 | 33.21 | 312 | 20 | 13.94 | 33.22 | 24.85 | 311 | 0.06 |
| 50 | 13.72 | 33.25 | 305 | 30 | 13.90 | 33.21 | 24.85 | 311 | 0.09 |
| 74 | 11.47 | 33.28 | 261 | 50 | 13.72 | 33.25 | 24.91 | 305 | 0.15 |
| 98 | 10.17 | 33.22 | 244 | 75 | 11.10 | 33.28 | 25.44 | 255 | 0.23 |
| 148 | 9.76 | 33.84 | 191 | 100 | 10.13 | 33.22 | 25.56 | 243 | 0.29 |
| 195 | 9.22 | 34.05 | 167 | 150 | 9.73 | 33.86 | 26.13 | 189 | 0.40 |
| 241 | 8.42 | 34.14 | 149 | 200 | 9.12 | 34.07 | 26.39 | 164 | 0.49 |
| 287 | 8.00 | 34.14 | 143 | 250 | 8.35 | 34.14 | 26.57 | 148 | 0.57 |
| 338 | - | 34.22 | | | | | | | |
| 385 | - | 34.20 | | | | | | | |
| 481 | 6.28 | 34.33 | 106 | | | | | | |
| 581 | 5.66 | 34.31 | 100 | | | | | | |
| 679 | 5.08 | 34.37 | 89 | | | | | | |

BLACK DOUGLAS; January 22, 1952; 1512 GCT;[a] 32°50'N, 117°31.5'W; sounding, 430 fm; wind, 360°, force 1; weather, clear; sea, moderate; wire angle, 00°. 93.30

| | | | |
|---|---|---|---|
| 0 | 14.00 | 33.26 | 310 |
| 10 | 14.02 | 33.22 | 313 |
| 20 | 14.02 | 33.26 | 310 |
| 29 | 13.93 | 33.22 | 311 |
| 48 | 13.40 | 33.31 | 294 |
| 67 | 11.96 | 33.30 | 268 |
| 85 | 10.81 | 33.40 | 241 |
| 104 | 10.04 | 33.42 | 227 |
| 114 | 10.00 | 33.62 | 211 |
| 123 | 9.95 | 33.64 | 209 |
| 128 | 9.82 | 33.71 | 202 |
| 133 | 9.96 | 33.78 | 199 |
| 189 | 9.30 | 34.05 | 169 |
| 237 | 8.57 | 34.14 | 151 |
| 286 | 8.10 | 34.21 | 139 |

a) Bathythermograph calibration cast.

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| **93.40** | BLACK DOUGLAS; January 22, 1952; 0820 GCT; 32°30.5'N, 118°08'W; sounding, 1000 fm; wind, 360°, force 2; weather, clear; sea, moderate; wire angle, 04°. | | | | | | | | |
| 0 | 13.96 | 33.28 | 307 | 0 | 13.96 | 33.28 | 24.89 | 307 | 0.00 |
| 10 | 13.97 | 33.28 | 308 | 10 | 13.97 | 33.28 | 24.89 | 308 | 0.03 |
| 25 | 14.00 | 33.31 | 306 | 20 | 13.99 | 33.29 | 24.89 | 307 | 0.06 |
| 49 | 13.92 | 33.33 | 303 | 30 | 14.00 | 33.32 | 24.91 | 305 | 0.09 |
| 73 | 11.58 | 33.33 | 259 | 50 | 13.92 | 33.33 | 24.93 | 303 | 0.15 |
| 97 | 10.95 | 33.55 | 232 | 75 | 11.51 | 33.33 | 25.40 | 258 | 0.22 |
| 149 | 9.92 | 33.96 | 185 | 100 | 10.90 | 33.62 | 25.74 | 226 | 0.28 |
| 195 | 8.72 | 33.95 | 167 | 150 | 9.91 | 33.96 | 26.18 | 185 | 0.39 |
| 288 | 8.11 | 34.23 | 138 | 200 | 8.65 | 33.95 | 26.37 | 166 | 0.48 |
| 387 | 6.98 | 34.25 | 121 | 250 | 8.32 | 34.11 | 26.55 | 150 | 0.56 |
| 481 | 6.32 | 34.33 | 106 | 300 | 8.00 | 34.23 | 26.69 | 136 | 0.63 |
| 579 | 5.78 | 34.38 | 96 | 400 | 6.86 | 34.26 | 26.88 | 118 | 0.77 |
| 772 | 4.74 | 34.43 | 81 | 500 | 6.22 | 34.34 | 27.02 | 104 | 0.88 |
| 963 | 4.02 | 34.49 | 69 | 600 | 5.66 | 34.39 | 27.13 | 94 | 0.99 |
| 1163 | 3.51 | 34.54 | 60 | 700 | 5.12 | 34.41 | 27.22 | 86 | 1.09 |
| | | | | 800 | 4.60 | 34.44 | 27.30 | 78 | 1.18 |
| | | | | 1000 | 3.92 | 34.50 | 27.42 | 67 | 1.34 |
| **93.50** | BLACK DOUGLAS; January 22, 1952; 0132 GCT; 32°15'N, 118°55'W; sounding, 680 fm; wind, 320°, force 7; weather, cloudy; sea, very rough; wire angle, 29°. | | | | | | | | |
| 0 | 13.52 | 33.19 | 305 | 0 | 13.52 | 33.19 | 24.91 | 305 | 0.00 |
| 9 | 13.52 | 33.22 | 303 | 10 | 13.53 | 33.22 | 24.93 | 303 | 0.03 |
| 22 | 13.54 | 33.24 | 302 | 20 | 13.55 | 33.24 | 24.94 | 302 | 0.06 |
| 43 | 13.54 | 33.19 | 306 | 30 | 13.56 | 33.23 | 24.93 | 303 | 0.09 |
| 64 | 13.50 | 33.24 | 301 | 50 | 13.53 | 33.20 | 24.91 | 305 | 0.15 |
| 85 | 11.26 | 32.99 | 279 | 75 | 13.41 | 33.15 | 24.90 | 306 | 0.23 |
| 128 | 9.34 | 33.49 | 211 | 100 | 10.31 | 33.16 | 25.49 | 251 | 0.30 |
| 167 | 8.66 | 33.80 | 178 | 150 | 8.90 | 33.68 | 26.12 | 190 | 0.41 |
| 244 | 8.08 | 34.13 | 145 | 200 | 8.36 | 33.97 | 26.43 | 161 | 0.50 |
| 326 | 7.25 | 34.25 | 124 | 250 | 8.02 | 34.15 | 26.62 | 142 | 0.58 |
| 407 | 6.77 | 34.27 | 116 | 300 | 7.49 | 34.23 | 26.76 | 129 | 0.65 |
| 493 | 6.16 | 34.25 | 110 | 400 | 6.80 | 34.27 | 26.89 | 117 | 0.78 |
| 593 | 5.61 | 34.33 | 98 | 500 | 6.12 | 34.25 | 26.97 | 110 | 0.90 |
| 685 | 5.26 | 34.34 | 93 | 600 | 5.58 | 34.33 | 27.10 | 97 | 1.01 |
| 878 | 4.40 | 34.47 | 74 | 700 | 5.20 | 34.34 | 27.15 | 92 | 1.11 |
| | | | | 800 | 4.75 | 34.41 | 27.26 | 82 | 1.20 |
| | | | | 1000 | (3.97) | (34.49) | (27.41) | (68) | (1.37) |
| **93.60** | BLACK DOUGLAS; January 21, 1952; 1809 GCT; 31°47'N, 119°37'W; sounding, 2000 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 26°. | | | | | | | | |
| 0 | 14.92 | 33.30 | 325 | 0 | 14.92 | 33.30 | 24.70 | 325 | 0.00 |
| 9 | 14.93 | 33.26 | 328 | 10 | 14.94 | 33.26 | 24.67 | 329 | 0.03 |
| 22 | 14.96 | 33.26 | 329 | 20 | 14.96 | 33.26 | 24.66 | 329 | 0.07 |
| 43 | 14.94 | 33.31 | 325 | 30 | 14.96 | 33.28 | 24.68 | 327 | 0.10 |
| 65 | 14.94 | 33.28 | 327 | 50 | 14.95 | 33.31 | 24.70 | 325 | 0.16 |
| 88 | 12.89 | 33.24 | 290 | 75 | 14.88 | 33.25 | 24.67 | 328 | 0.25 |
| 132 | 9.32 | 33.42 | 216 | 100 | 11.10 | 33.24 | 25.41 | 258 | 0.32 |
| 176 | 8.83 | 33.77 | 182 | 150 | 9.09 | 33.60 | 26.03 | 199 | 0.44 |
| 264 | 7.84 | 34.09 | 144 | 200 | 8.60 | 33.90 | 26.34 | 169 | 0.53 |
| 355 | 6.98 | 34.16 | 127 | 250 | 8.01 | 34.06 | 26.56 | 149 | 0.61 |
| 442 | 6.20 | 34.23 | 112 | 300 | 7.49 | 34.13 | 26.69 | 136 | 0.68 |
| 530 | 5.65 | 34.27 | 103 | 400 | 6.57 | 34.20 | 26.87 | 119 | 0.82 |
| 702 | 4.94 | 34.40 | 85 | 500 | 5.81 | 34.26 | 27.01 | 105 | 0.94 |
| 881 | 4.31 | 34.45 | 75 | 600 | 5.33 | 34.31 | 27.11 | 96 | 1.04 |
| 1073 | 3.72 | 34.49 | 66 | 700 | 4.95 | 34.40 | 27.23 | 85 | 1.14 |
| | | | | 800 | 4.59 | 34.43 | 27.29 | 79 | 1.23 |
| | | | | 1000 | 3.93 | 34.47 | 27.39 | 69 | 1.40 |

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

BLACK DOUGLAS; January 21, 1952; 1124 GCT; 31°29'N, 120°14'W; sounding, 2140 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 28°. 93.70

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.66 | 33.24 | 324 | 0 | 14.66 | 33.24 | 24.71 | 324 | 0.00 |
| 9 | 14.68 | 33.24 | 325 | 10 | 14.69 | 33.24 | 24.70 | 325 | 0.03 |
| 22 | 14.70 | 33.28 | 322 | 20 | 14.70 | 33.28 | 24.73 | 322 | 0.06 |
| 48 | 14.66 | 33.28 | 321 | 30 | 14.70 | 33.29 | 24.74 | 321 | 0.10 |
| 69 | 14.65 | 33.24 | 324 | 50 | 14.65 | 33.28 | 24.74 | 321 | 0.16 |
| 93 | 12.34 | 33.06 | 293 | 75 | 14.61 | 33.22 | 24.71 | 325 | 0.24 |
| 137 | 10.12 | 33.35 | 233 | 100 | 11.40 | 33.06 | 25.22 | 276 | 0.32 |
| 178 | 9.14 | 33.64 | 197 | 150 | 9.82 | 33.45 | 25.79 | 221 | 0.44 |
| 265 | 7.83 | 34.00 | 151 | 200 | 8.68 | 33.77 | 26.23 | 180 | 0.55 |
| 352 | 6.99 | 34.16 | 128 | 250 | 8.00 | 33.96 | 26.48 | 156 | 0.63 |
| 435 | 6.10 | 34.24 | 110 | 300 | 7.49 | 34.08 | 26.65 | 140 | 0.71 |
| 686 | 4.96 | 34.34 | 90 | 400 | 6.50 | 34.21 | 26.89 | 118 | 0.84 |
| 867 | 4.32 | 34.49 | 72 | 500 | 5.71 | 34.28 | 27.04 | 103 | 0.96 |
| 1061 | 3.78 | 34.52 | 64 | 600 | 5.28 | 34.32 | 27.13 | 95 | 1.06 |
| | | | | 700 | 4.91 | 34.34 | 27.18 | 89 | 1.16 |
| | | | | 800 | 4.59 | 34.43 | 27.29 | 79 | 1.26 |
| | | | | 1000 | 3.93 | 34.52 | 27.43 | 66 | 1.42 |

BLACK DOUGLAS; January 20, 1952; 0025, 0035 GCT; 32°15.5'N, 117°09'W; sounding, 37 fm; wind, 280°, force 2; weather, cloudy; sea, moderate; wire angle, 04°, 03°. 97.30

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.29 | 33.33 | 310 | 0 | 14.29 | 33.33 | 24.86 | 310 | 0.00 |
| 10 | 14.19 | 33.35 | 307 | 10 | 14.19 | 33.35 | 24.89 | 307 | 0.03 |
| 20 | 14.12 | 33.37 | 304 | 20 | 14.12 | 33.37 | 24.92 | 304 | 0.06 |
| | | | | 30 | 14.08 | 33.38 | 24.94 | 302 | 0.09 |
| 30 | 14.08 | - | | 50 | (14.07) | (33.40) | (24.96) | (301) | (0.15) |
| 49 | 14.07 | 33.40 | 301 | | | | | | |

BLACK DOUGLAS; January 20, 1952; 0305 GCT; 32°11.5'N, 117°17'W; sounding, 750 fm; wind, 280°, force 2; weather, partly cloudy; sea, moderate; wire angle, 04°. 97.32

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.24 | 33.30 | 311 | 0 | 14.24 | 33.30 | 24.84 | 311 | 0.00 |
| 10 | 14.24 | 33.35 | 308 | 10 | 14.24 | 33.35 | 24.88 | 308 | 0.03 |
| 25 | 14.22 | 33.33 | 309 | 20 | 14.23 | 33.33 | 24.87 | 309 | 0.06 |
| 49 | 13.56 | 33.40 | 291 | 30 | 14.19 | 33.33 | 24.88 | 308 | 0.09 |
| 73 | 12.05 | 33.51 | 254 | 50 | 13.59 | 33.41 | 25.06 | 291 | 0.15 |
| 96 | 10.36 | 33.57 | 221 | 75 | 11.99 | 33.52 | 25.46 | 253 | 0.22 |
| 147 | 10.13 | 33.96 | 188 | 100 | 10.28 | 33.59 | 25.82 | 218 | 0.28 |
| 195 | 9.52 | 34.13 | 166 | 150 | 10.11 | 33.97 | 26.15 | 187 | 0.38 |
| 288 | 8.20 | 34.20 | 141 | 200 | 9.41 | 34.14 | 26.40 | 164 | 0.47 |
| 385 | 7.23 | 34.23 | 125 | 250 | 8.61 | 34.19 | 26.57 | 148 | 0.55 |
| 478 | 6.52 | 34.27 | 113 | 300 | 8.05 | 34.20 | 26.66 | 139 | 0.63 |
| 576 | 5.98 | 34.31 | 104 | 400 | 7.10 | 34.24 | 26.83 | 123 | 0.76 |
| 768 | 4.87 | 34.38 | 86 | 500 | 6.40 | 34.28 | 26.95 | 111 | 0.89 |
| 959 | 4.19 | 34.42 | 76 | 600 | 5.83 | 34.32 | 27.06 | 101 | 1.00 |
| 1159 | 3.48 | 34.49 | 64 | 700 | 5.23 | 34.36 | 27.16 | 91 | 1.10 |
| | | | | 800 | 4.71 | 34.39 | 27.25 | 83 | 1.20 |
| | | | | 1000 | 4.02 | 34.43 | 27.35 | 73 | 1.37 |

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| **97.40** | BLACK DOUGLAS; January 20, 1952; 0835 GCT; 31°55'N, 117°50'W; sounding, 480 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 09°. | | | | | | | | |
| 0 | 14.49 | 33.26 | 319 | 0 | 14.49 | 33.26 | 24.76 | 319 | 0.00 |
| 10 | 14.48 | 33.28 | 318 | 10 | 14.48 | 33.28 | 24.78 | 318 | 0.03 |
| 25 | 14.49 | 33.30 | 316 | 20 | 14.49 | 33.30 | 24.79 | 316 | 0.06 |
| 49 | 14.50 | 33.19 | 325 | 30 | 14.50 | 33.29 | 24.78 | 317 | 0.10 |
| 73 | 14.40 | 33.24 | 319 | 50 | 14.50 | 33.19 | 24.71 | 325 | 0.16 |
| 97 | 11.79 | 33.04 | 284 | 75 | 14.39 | 33.24 | 24.77 | 319 | 0.24 |
| 146 | 9.72 | 33.58 | 210 | 100 | 11.42 | 33.05 | 25.20 | 277 | 0.32 |
| 190 | 8.90 | 33.87 | 176 | 150 | 9.63 | 33.62 | 25.96 | 206 | 0.44 |
| 234 | 8.25 | 34.04 | 154 | 200 | 8.72 | 33.92 | 26.34 | 170 | 0.53 |
| 279 | 7.80 | 34.09 | 144 | 250 | 8.09 | 34.07 | 26.55 | 149 | 0.61 |
| 374 | 7.07 | 34.22 | 124 | 300 | 7.62 | 34.10 | 26.64 | 140 | 0.69 |
| 466 | 6.52 | 34.22 | 117 | 400 | 6.93 | 34.22 | 26.84 | 122 | 0.83 |
| 567 | 5.90 | 34.31 | 103 | 500 | 6.44 | 34.24 | 26.92 | 115 | 0.95 |
| 665 | 5.23 | 34.43 | 86 | 600 | 5.65 | 34.36 | 27.11 | 96 | 1.06 |
| 770 | 4.84 | 34.47 | 79 | 700 | 5.08 | 34.45 | 27.25 | 83 | 1.16 |
| | | | | 800 | (4.78) | (34.47) | (27.30) | (78) | (1.25) |
| **97.50** | BLACK DOUGLAS; January 20, 1952; 1526 GCT; 31°35'N, 118°29'W; sounding, 1300 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 20°. | | | | | | | | |
| 0 | 14.45 | 33.40 | 308 | 0 | 14.45 | 33.40 | 24.88 | 308 | 0.00 |
| 10 | 14.46 | 33.28 | 317 | 10 | 14.46 | 33.28 | 24.78 | 317 | 0.03 |
| 24 | 14.48 | 33.39 | 310 | 20 | 14.47 | 33.38 | 24.86 | 310 | 0.06 |
| 46 | 14.48 | 33.39 | 310 | 30 | 14.48 | 33.39 | 24.86 | 310 | 0.09 |
| 68 | 14.40 | 33.36 | 310 | 50 | 14.48 | 33.38 | 24.86 | 310 | 0.16 |
| 89 | 12.28 | 33.22 | 280 | 75 | 14.30 | 33.34 | 24.86 | 310 | 0.23 |
| 136 | 10.84 | 33.78 | 213 | 100 | 11.81 | 33.23 | 25.27 | 271 | 0.31 |
| 180 | 9.30 | 33.89 | 180 | 150 | 10.41 | 33.83 | 25.99 | 203 | 0.43 |
| 267 | 8.09 | 34.07 | 149 | 200 | 8.91 | 33.91 | 26.30 | 173 | 0.52 |
| 358 | 7.00 | 34.02 | 138 | 250 | 8.28 | 34.03 | 26.49 | 155 | 0.61 |
| 444 | 6.54 | 34.29 | 112 | 300 | 7.70 | 34.07 | 26.61 | 144 | 0.68 |
| 534 | 5.99 | 34.29 | 105 | 400 | 6.78 | | | | |
| 714 | 5.04 | 34.36 | 89 | 500 | 6.22 | | | | |
| 895 | 4.22 | 34.58 | 64 | 600 | 5.63 | | | | |
| 1092 | 3.68 | 34.51 | 64 | 700 | 5.12 | | | | |
| | | | | 800 | 4.63 | | | | |
| | | | | 1000 | 3.92 | | | | |
| **97.60** | BLACK DOUGLAS; January 20, 1952; 2205, 2230 GCT; 31°15'N, 119°13'W; sounding, 2080 fm; wind, 290°, force 4; weather, overcast; sea, moderate; wire angle, 23°, 20°. | | | | | | | | |
| 0 | 14.54 | 33.17 | 327 | 0 | 14.54 | 33.17 | 24.68 | 327 | 0.00 |
| 10 | 14.54 | 33.24 | 322 | 10 | 14.54 | 33.24 | 24.74 | 322 | 0.03 |
| | | | | 20 | 14.55 | 33.24 | 24.73 | 322 | 0.06 |
| 10a) | 14.54 | 33.24 | 322 | 30 | 14.56 | 33.25 | 24.74 | 322 | 0.10 |
| 24 | 14.56 | 33.24 | 322 | 50 | 14.57 | 33.31 | 24.78 | 317 | 0.16 |
| 51 | 14.57 | 33.31 | 317 | 75 | 14.38 | 33.30 | 24.82 | 314 | 0.24 |
| 73 | 14.39 | 33.30 | 314 | 100 | 10.92 | 33.17 | 25.39 | 260 | 0.31 |
| 99 | 10.94 | 33.17 | 260 | 150 | 9.58 | 33.56 | 25.92 | 209 | 0.43 |
| 146 | 9.66 | 33.51 | 214 | 200 | 8.83 | 33.95 | 26.34 | 169 | 0.53 |
| 193 | 8.90 | 33.93 | 171 | 250 | 8.31 | 34.05 | 26.50 | 154 | 0.61 |
| 288 | 7.98 | 34.11 | 145 | 300 | 7.86 | 34.13 | 26.63 | 142 | 0.69 |
| 386 | 7.16 | 34.22 | 125 | 400 | 7.03 | 34.23 | 26.83 | 123 | 0.82 |
| 481 | 6.32 | 34.29 | 109 | 500 | 6.19 | 34.30 | 27.00 | 107 | 0.95 |
| 577 | 5.81 | 34.41 | 94 | 600 | 5.69 | 34.43 | 27.16 | 91 | 1.05 |
| 767 | 4.75 | 34.50 | 75 | 700 | 5.15 | 34.48 | 27.27 | 81 | 1.15 |
| 965 | 4.12 | 34.51 | 68 | 800 | 4.61 | 34.50 | 27.34 | 74 | 1.23 |
| 1164 | 3.54 | 34.59 | 57 | 1000 | 4.05 | 34.51 | 27.41 | 68 | 1.39 |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

BLACK DOUGLAS; January 21, 1952; 0448 GCT; 30°55'N, 119°51'W; sounding, 2020 fm; wind, 290°, force 3; weather, drizzle; sea, moderate; wire angle, 12°. 97.70

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.43 | 33.37 | 310 | 0 | 14.43 | 33.37 | 24.86 | 310 | 0.00 |
| 10 | 14.45 | 33.33 | 313 | 10 | 14.45 | 33.33 | 24.82 | 313 | 0.03 |
| 24 | 14.47 | 33.38 | 310 | 20 | 14.47 | 33.37 | 24.85 | 311 | 0.06 |
| 48 | 14.47 | 33.35 | 312 | 30 | 14.48 | 33.37 | 24.85 | 311 | 0.09 |
| 72 | 14.40 | 33.37 | 310 | 50 | 14.46 | 33.35 | 24.84 | 312 | 0.16 |
| 95 | 11.37 | 33.21 | 265 | 75 | 14.38 | 33.37 | 24.87 | 309 | 0.23 |
| 146 | 10.03 | 33.58 | 215 | 100 | 11.05 | 33.21 | 25.39 | 259 | 0.31 |
| 191 | 8.84 | 33.89 | 174 | 150 | 9.95 | 33.64 | 25.92 | 209 | 0.42 |
| 282 | 7.86 | 34.07 | 146 | 200 | 8.68 | 33.92 | 26.34 | 169 | 0.52 |
| 379 | 6.80 | 34.18 | 124 | 250 | 8.09 | 34.02 | 26.51 | 153 | 0.60 |
| 471 | 5.99 | 34.21 | 111 | 300 | 7.71 | 34.10 | 26.63 | 142 | 0.68 |
| 567 | 5.52 | 34.33 | 97 | 400 | 6.58 | 34.19 | 26.86 | 120 | 0.81 |
| 758 | 4.79 | 34.47 | 78 | 500 | 5.85 | 34.23 | 26.98 | 108 | 0.94 |
| 948 | 4.08 | 34.45 | 72 | 600 | 5.37 | 34.37 | 27.15 | 92 | 1.04 |
| 1149 | 3.52 | 34.51 | 62 | 700 | 4.97 | 34.46 | 27.27 | 81 | 1.14 |
| | | | | 800 | 4.64 | 34.46 | 27.31 | 77 | 1.22 |
| | | | | 1000 | 3.91 | 34.46 | 27.39 | 70 | 1.39 |

HORIZON; January 19, 1952; 0345 GCT; 31°42'N, 116°43.5'W; sounding, 62 fm; wind, 190°, force 2; weather, partly cloudy; sea, very rough; wire angle, 02°. 100.29

| | | | |
|---|---|---|---|
| 0 | 14.48 | - | |
| 10 | 14.50 | 33.42 | 308 |
| 20 | 14.52 | - | |
| 30 | 14.48 | - | |
| 50 | 14.46 | - | |
| 75 | 14.16 | - | |

HORIZON; January 18, 1952; 2236 GCT; 31°20'N, 117°23'W; sounding, 1150 fm; wind, 240°, force 5; weather, cloudy; sea, high; wire angle, 23°. 100.40

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.17 | 33.51E | 315 | 0 | 15.17 | 33.51 | 24.81 | 315 | 0.00 |
| 9 | 15.17 | 33.44 | 320 | 10 | 15.17 | 33.44 | 24.75 | 320 | 0.03 |
| 23 | 15.19 | 33.46E | 319 | 20 | 15.19 | 33.46 | 24.76 | 319 | 0.06 |
| 46 | 15.11 | 33.46E | 317 | 30 | 15.19 | 33.47 | 24.77 | 318 | 0.10 |
| 67 | 14.42 | 33.33E | 313 | 50 | 15.02 | 33.44 | 24.79 | 317 | 0.16 |
| 87 | 12.54 | 33.40E | 271 | 75 | 13.64 | 33.33 | 24.99 | 297 | 0.24 |
| 132 | 10.20 | 33.58E | 218 | 100 | 11.71 | 33.46 | 25.47 | 252 | 0.31 |
| 172 | 9.28 | 33.98E | 174 | 150 | 9.71 | 33.78 | 26.07 | 195 | 0.42 |
| 253 | 8.18 | 34.13E | 146 | 200 | 8.84 | 34.05 | 26.42 | 162 | 0.51 |
| 339 | 8.00 | 34.31E | 130 | 250 | 8.21 | 34.13 | 26.58 | 146 | 0.59 |
| 422 | 7.11 | 34.33E | 116 | 300 | 8.00 | 34.24 | 26.70 | 135 | 0.66 |
| 509 | 6.40 | 34.33E | 107 | 400 | 7.44 | 34.33 | 26.85 | 121 | 0.80 |
| 686 | 5.28 | 34.60E | 74 | 500 | 6.47 | 34.33 | 26.98 | 108 | 0.92 |
| 870 | 4.51 | 34.43E | 78 | 600 | 5.80 | | | | |
| 1071 | 3.84 | - | | 700 | 5.21 | | | | |
| | | | | 800 | 4.78 | | | | |
| | | | | 1000 | 4.08 | | | | |

E Evaporation of salinity samples in storage (see Notes on Particular Cruises).

S10

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| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| **100.50** | HORIZON; January 18, 1952; 1719 GCT; 31°01.5'N, 118°04'W; sounding, 1200 fm; wind, 240°, force 6; weather, rain showers; sea, high; wire angle, 17°. | | | | | | | | |
| 0 | 15.07 | 33.44E | 318 | 0 | 15.07 | 33.44 | 24.78 | 318 | 0.00 |
| 9 | 15.06 | 33.44 | 318 | 10 | 15.07 | 33.44 | 24.78 | 318 | 0.03 |
| 23 | 15.08 | 33.44E | 318 | 20 | 15.08 | 33.44 | 24.77 | 318 | 0.06 |
| 42 | 15.08 | 33.46E | 317 | 30 | 15.08 | 33.44 | 24.77 | 318 | 0.10 |
| 61 | 14.89 | 33.49E | 311 | 50 | 15.05 | 33.47 | 24.80 | 315 | 0.16 |
| 80 | 11.54 | 33.51E | 245 | 75 | 12.15 | 33.51 | 25.42 | 256 | 0.23 |
| 122 | 10.05 | 33.68E | 208 | 100 | 10.60 | 33.56 | 25.75 | 226 | 0.29 |
| 162 | 9.44 | 33.96E | 177 | 150 | 9.62 | 33.89 | 26.17 | 185 | 0.40 |
| 247 | 8.55 | 33.98E | 163 | 200 | 9.00 | 33.97 | 26.33 | 170 | 0.49 |
| 339 | 8.06 | 34.33E | 129 | 250 | 8.53 | 33.98 | 26.41 | 162 | 0.57 |
| 432 | 6.98 | 34.31E | 116 | 300 | 8.24 | 34.08 | 26.54 | 151 | 0.65 |
| 535 | 6.22 | 34.33E | 105 | 400 | 7.35 | 34.32 | 26.86 | 120 | 0.79 |
| 727 | 5.06 | 34.38E | 88 | 500 | 6.49 | 34.32 | 26.97 | 109 | 0.92 |
| 921 | 4.26 | 34.47E | 73 | 600 | 5.74 | 34.34 | 27.09 | 99 | 1.03 |
| 1127 | 3.63 | - | | 700 | 5.17 | 34.37 | 27.18 | 90 | 1.13 |
| | | | | 800 | 4.77 | 34.41 | 27.26 | 82 | 1.22 |
| | | | | 1000 | 3.98 | (34.50) | (27.41) | (68) | (1.39) |
| **100.60** | HORIZON; January 18, 1952; 1208 GCT; 30°41'N, 118°47.5'W; sounding, 1350 fm; wind, 250°, force 8; weather, rain showers; sea, very rough; wire angle, 18°. | | | | | | | | |
| 0 | 14.61 | 33.31E | 318 | 0 | 14.61 | 33.31 | 24.77 | 318 | 0.00 |
| 10 | 14.62 | 33.33 | 317 | 10 | 14.62 | 33.33 | 24.79 | 317 | 0.03 |
| 24 | 14.66 | 33.38E | 314 | 20 | 14.63 | 33.36 | 24.81 | 315 | 0.06 |
| 48 | 14.69 | 33.40E | 313 | 30 | 14.68 | 33.39 | 24.82 | 314 | 0.09 |
| 71 | 12.38 | 33.36E | 271 | 50 | 14.68 | 33.40 | 24.83 | 313 | 0.16 |
| 94 | 11.24 | 33.46E | 244 | 75 | 12.12 | 33.36 | 25.31 | 267 | 0.23 |
| 143 | 9.56 | 33.75E | 195 | 100 | 11.01 | 33.50 | 25.63 | 237 | 0.29 |
| 188 | 8.84 | 34.02E | 164 | 150 | 9.41 | 33.80 | 26.13 | 189 | 0.40 |
| 278 | 7.55 | 34.11E | 139 | 200 | 8.69 | 34.04 | 26.44 | 160 | 0.49 |
| 373 | 6.97 | 34.23E | 122 | 250 | 8.03 | 34.08 | 26.57 | 148 | 0.57 |
| 465 | 6.38 | 34.27E | 112 | 300 | 7.35 | 34.14 | 26.71 | 134 | 0.64 |
| 560 | 5.80 | 34.34E | 99 | 400 | 6.85 | 34.25 | 26.87 | 119 | 0.77 |
| 748 | 4.81 | 34.42E | 82 | 500 | 6.15 | 34.29 | 26.99 | 107 | 0.89 |
| 936 | 4.22 | 34.51E | 69 | 600 | 5.58 | 34.36 | 27.12 | 95 | 1.00 |
| 1139 | 3.66 | 34.49E | 65 | 700 | 5.03 | 34.40 | 27.22 | 86 | 1.10 |
| | | | | 800 | 4.60 | 34.45 | 27.31 | 78 | 1.19 |
| | | | | 1000 | 4.07 | 34.50 | 27.40 | 68 | 1.35 |
| **100.70** | HORIZON; January 18, 1952; 0607 GCT; 30°21'N, 119°27'W; sounding, 2150 fm; wind, 190°, force 6; weather, rain; sea, very rough; wire angle, 18°. | | | | | | | | |
| 0 | 14.72 | 33.35E | 317 | 0 | 14.72 | 33.35 | 24.78 | 317 | 0.00 |
| 9 | 14.70 | 33.33 | 319 | 10 | 14.70 | 33.33 | 24.77 | 319 | 0.03 |
| 23 | 14.72 | 33.35E | 317 | 20 | 14.72 | 33.34 | 24.77 | 318 | 0.06 |
| 51 | 14.52 | 33.42E | 308 | 30 | 14.70 | 33.38 | 24.81 | 315 | 0.10 |
| 74 | 11.36 | - | | 50 | 14.51 | 33.42 | 24.88 | 308 | 0.16 |
| 101 | 9.80 | 33.40E | 225 | 75 | 11.30 | 33.37 | 25.47 | 252 | 0.23 |
| | | | | 100 | 9.81 | 33.40 | 25.76 | 225 | 0.29 |

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| HORIZON; January 18, 1952; 0046 GCT; 30°01'N, 120°07'W; sounding, 2400 fm; wind, 190°, force 5; weather, rain; sea, very rough; wire angle, 14°. | | | | | | | | | 100.80 |
| 0 | 15.73 | 33.48E | 329 | 0 | 15.73 | 33.48 | 24.66 | 329 | 0.00 |
| 10 | 15.73 | 33.36 | 338 | 10 | 15.73 | 33.36 | 24.57 | 338 | 0.03 |
| 25 | 15.75 | 33.39E | 336 | 20 | 15.75 | 33.39 | 24.59 | 336 | 0.07 |
| 48 | 15.80 | - | | 30 | 15.77 | 33.40 | 24.59 | 336 | 0.10 |
| 72 | 15.76 | 33.49E | 329 | 50 | 15.80 | 33.44 | 24.61 | 333 | 0.17 |
| 95 | 12.65 | 33.28E | 282 | 75 | 15.71 | 33.49 | 24.67 | 328 | 0.25 |
| 144 | 9.82 | 33.48E | 219 | 100 | 11.95 | 33.28 | 25.28 | 270 | 0.33 |
| 188 | 8.85 | 33.81E | 180 | 150 | 9.69 | 33.50 | 25.85 | 215 | 0.45 |
| 277 | 8.17 | 34.16E | 144 | 200 | 8.69 | 33.89 | 26.32 | 171 | 0.55 |
| 366 | 7.36 | 34.23E | 127 | 250 | 8.28 | 34.12 | 26.56 | 148 | 0.63 |
| 459 | 6.61 | 34.31E | 111 | 300 | 8.01 | 34.18 | 26.65 | 140 | 0.70 |
| 555 | 6.00 | 34.31E | 104 | 400 | 7.04 | 34.27 | 26.86 | 120 | 0.84 |
| 746 | 5.12 | 34.45E | 83 | 500 | 6.33 | 34.31 | 26.99 | 108 | 0.96 |
| 937 | 4.16 | 34.51E | 69 | 600 | 5.78 | 34.33 | 27.07 | 100 | 1.07 |
| 1139 | 3.62 | 34.56E | 60 | 700 | 5.31 | 34.42 | 27.20 | 88 | 1.17 |
| | | | | 800 | 4.87 | 34.47 | 27.29 | 79 | 1.26 |
| | | | | 1000 | 3.97 | 34.53 | 27.44 | 65 | 1.43 |
| HORIZON; January 17, 1952; 1937 GCT; 29°40.5'N, 120°47'W; sounding, 2000 fm; wind, 180°, force 4; weather, overcast; sea, high; wire angle, 24°. | | | | | | | | | 100.90 |
| 0 | 15.84 | 33.51E | 329 | 0 | 15.84 | 33.51 | 24.66 | 329 | 0.00 |
| 9 | 15.84 | 33.48 | 331 | 10 | 15.85 | 33.48 | 24.63 | 332 | 0.03 |
| 23 | 15.87 | 33.52E | 329 | 20 | 15.87 | 33.52 | 24.66 | 329 | 0.07 |
| 49 | 15.84 | 33.49E | 331 | 30 | 15.89 | 33.52 | 24.66 | 329 | 0.10 |
| 71 | 15.67 | 33.49E | 327 | 50 | 15.84 | 33.49 | 24.64 | 331 | 0.17 |
| 98 | 12.28 | 33.34E | 271 | 75 | 15.58 | 33.49 | 24.70 | 325 | 0.25 |
| 148 | 10.64 | 33.82E | 207 | 100 | 11.93 | 33.34 | 25.33 | 265 | 0.32 |
| 196 | 10.24 | 34.04E | 184 | 150 | 10.62 | 33.83 | 25.95 | 206 | 0.44 |
| 294 | 9.44 | 34.33E | 150 | 200 | 10.21 | 34.06 | 26.20 | 182 | 0.54 |
| 397 | 8.74 | 34.38E | 136 | 250 | 9.83 | 34.24 | 26.41 | 163 | 0.63 |
| 496 | 7.52 | 34.31E | 123 | 300 | 9.40 | 34.34 | 26.56 | 149 | 0.71 |
| 595 | 6.34 | 34.34E | 106 | 400 | 8.71 | 34.38 | 26.70 | 135 | 0.86 |
| 791 | 4.98 | 34.42E | 84 | 500 | 7.45 | 34.31 | 26.83 | 122 | 0.99 |
| 991 | 4.25 | 34.44E | 75 | 600 | 6.29 | 34.34 | 27.02 | 105 | 1.12 |
| 1193 | 3.60 | 34.56E | 59 | 700 | 5.48 | 34.39 | 27.16 | 92 | 1.22 |
| | | | | 800 | 4.94 | 34.42 | 27.24 | 84 | 1.32 |
| | | | | 1000 | 4.22 | 34.44 | 27.34 | 74 | 1.50 |
| HORIZON; January 16, 1952; 0849 GCT; 30°44.5'N, 116°21.5'W; sounding, 46 fm; wind, 200°, force 1; weather, overcast; sea, rough; wire angle, 04°. | | | | | | | | | 105.32 |
| 0 | 15.20 | 33.46E | 319 | 0 | 15.20 | 33.46 | 24.76 | 319 | 0.00 |
| 10 | 15.21 | 33.42 | 322 | 10 | 15.21 | 33.42 | 24.73 | 322 | 0.03 |
| 20 | 15.16 | 33.53E | 313 | 20 | 15.16 | 33.53 | 24.82 | 313 | 0.06 |
| 29 | 15.07 | 33.46E | 317 | 30 | 15.05 | 33.46 | 24.80 | 316 | 0.10 |
| 49 | 14.34 | 33.44E | 303 | 50 | 13.70 | 33.44 | 25.06 | 291 | 0.16 |
| 73 | 11.96 | 33.51E | 253 | 75 | (11.88) | (33.52) | (25.48) | (251) | (0.22) |

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| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

105.35

HORIZON; January 16, 1952; 1049 GCT; 30°38.5'N, 116°33.5'W; sounding, 650 fm; wind, 210°, force 2; weather, overcast; sea, moderate; wire angle, 10°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.25 | 33.42E | 323 | 0 | 15.25 | 33.42 | 24.72 | 323 | 0.00 |
| 10 | 15.26 | 33.40 | 325 | 10 | 15.26 | 33.40 | 24.70 | 325 | 0.03 |
| 25 | 15.28 | 33.42E | 324 | 20 | 15.28 | 33.41 | 24.71 | 325 | 0.06 |
| 49 | 15.18 | 33.43E | 321 | 30 | 15.26 | 33.42 | 24.72 | 323 | 0.10 |
| 74 | 11.90 | 33.28E | 269 | 50 | 15.17 | 33.43 | 24.75 | 321 | 0.16 |
| 98 | 10.84 | 33.44E | 239 | 75 | 11.85 | 33.28 | 25.30 | 268 | 0.24 |
| 149 | 9.66 | 33.86E | 188 | 100 | 10.80 | 33.45 | 25.63 | 237 | 0.30 |
| 196 | 9.02 | 33.99E | 169 | 150 | 9.67 | 33.86 | 26.14 | 188 | 0.41 |
| 291 | 7.97 | 34.20E | 138 | 200 | 8.98 | 34.00 | 26.36 | 167 | 0.50 |
| 391 | 6.92 | 34.16E | 127 | 250 | 8.40 | 34.14 | 26.56 | 148 | 0.58 |
| 486 | 6.45 | 34.23E | 115 | 300 | 7.88 | 34.20 | 26.68 | 137 | 0.65 |
| 585 | 5.90 | 34.34E | 100 | 400 | 6.87 | 34.16 | 26.80 | 126 | 0.79 |
| 777 | 4.76 | 34.40E | 83 | 500 | 6.38 | 34.25 | 26.93 | 113 | 0.92 |
| 964 | 4.12 | 34.47E | 71 | 600 | 5.80 | 34.35 | 27.09 | 99 | 1.03 |
| 1164 | 3.68 | 34.47E | 67 | 700 | 5.19 | 34.38 | 27.18 | 89 | 1.13 |
| | | | | 800 | 4.68 | 34.40 | 27.26 | 82 | 1.22 |
| | | | | 1000 | 4.03 | 34.47 | 27.38 | 70 | 1.39 |

105.40

HORIZON; January 16, 1952; 1411 GCT; 30°29'N, 116°54'W; sounding, 900 fm; wind, 160°, force 3; weather, overcast; sea, high; wire angle, 24°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.46 | 33.50E | 322 | 0 | 15.46 | 33.50 | 24.74 | 322 | 0.00 |
| 9 | 15.47 | 33.44 | 326 | 10 | 15.48 | 33.44 | 24.69 | 327 | 0.03 |
| 23 | 15.48 | 33.48E | 324 | 20 | 15.48 | 33.47 | 24.71 | 324 | 0.07 |
| 44 | 15.04 | 33.49E | 314 | 30 | 15.42 | 33.49 | 24.74 | 322 | 0.10 |
| 65 | 12.57 | 33.30E | 279 | 50 | 14.20 | 33.47 | 24.98 | 298 | 0.16 |
| 86 | 11.28 | 33.39E | 250 | 75 | 11.98 | 33.33 | 25.32 | 266 | 0.23 |
| 132 | 9.69 | 33.71E | 200 | 100 | 10.64 | 33.49 | 25.68 | 232 | 0.29 |
| 174 | 8.96 | 34.03E | 165 | 150 | 9.32 | 33.90 | 26.23 | 180 | 0.40 |
| 257 | 8.13 | 34.13E | 145 | 200 | 8.68 | 34.06 | 26.45 | 159 | 0.48 |
| 345 | 7.02 | 34.20E | 125 | 250 | 8.20 | 34.12 | 26.57 | 147 | 0.56 |
| 429 | 6.34 | 34.23E | 114 | 300 | 7.68 | 34.17 | 26.69 | 136 | 0.64 |
| 518 | 6.06 | 34.33E | 103 | 400 | 6.55 | 34.22 | 26.89 | 117 | 0.77 |
| 695 | 5.19 | 34.45E | 84 | 500 | 6.09 | 34.31 | 27.02 | 105 | 0.88 |
| 876 | 4.35 | 34.45E | 75 | 600 | 5.77 | 34.41 | 27.14 | 94 | 0.99 |
| 1069 | 3.84 | 34.47E | 68 | 700 | 5.18 | 34.45 | 27.24 | 84 | 1.09 |
| | | | | 800 | 4.66 | 34.45 | 27.30 | 78 | 1.18 |
| | | | | 1000 | 4.01 | 34.46 | 27.38 | 71 | 1.34 |

105.50

HORIZON; January 16, 1952; 1927 GCT; 30°12.5'N, 117°27'W; sounding, 1200 fm; wind, 200°, force 4; weather, overcast; sea, high; wire angle, 23°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.11 | 33.39E | 323 | 0 | 15.11 | 33.39 | 24.73 | 323 | 0.00 |
| 9 | 15.08 | 33.37 | 323 | 10 | 15.09 | 33.37 | 24.72 | 324 | 0.03 |
| 23 | 15.10 | 33.42E | 320 | 20 | 15.10 | 33.42 | 24.75 | 320 | 0.06 |
| 49 | 14.98 | 33.39E | 320 | 30 | 15.07 | 33.42 | 24.76 | 320 | 0.10 |
| 70 | 14.85 | 33.40E | 316 | 50 | 14.98 | 33.39 | 24.76 | 320 | 0.16 |
| 96 | 11.10 | 33.40E | 246 | 75 | 14.75 | 33.40 | 24.81 | 314 | 0.24 |
| 142 | 9.63 | 33.82E | 191 | 100 | 10.88 | 33.40 | 25.57 | 242 | 0.31 |
| 188 | 8.68 | 34.02E | 161 | 150 | 9.45 | 33.86 | 26.17 | 185 | 0.42 |
| 283 | 8.08 | 34.22E | 138 | 200 | 8.56 | 34.06 | 26.47 | 157 | 0.51 |
| 381 | 7.60 | 34.31E | 125 | 250 | 8.23 | 34.17 | 26.61 | 144 | 0.58 |
| 475 | 6.61 | 34.34E | 109 | 300 | 7.99 | 34.24 | 26.70 | 135 | 0.65 |
| 570 | 5.78 | 34.34E | 99 | 400 | 7.42 | 34.32 | 26.85 | 121 | 0.79 |
| 759 | 4.82 | 34.42E | 82 | 500 | 6.36 | 34.34 | 27.01 | 106 | 0.91 |
| 956 | 4.36 | 34.47E | 74 | 600 | 5.59 | 34.34 | 27.10 | 97 | 1.02 |
| 1153 | 3.66 | 34.52E | 63 | 700 | 5.07 | 34.39 | 27.21 | 87 | 1.12 |
| | | | | 800 | 4.70 | 34.43 | 27.28 | 80 | 1.21 |
| | | | | 1000 | 4.22 | 34.48 | 27.37 | 71 | 1.38 |

| OBSERVED | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

105.60

HORIZON; January 17, 1952; 0109 GCT; 29°48.5'N, 118°14'W; sounding, 1950 fm; wind, 200°, force 3; weather, overcast; sea, high; wire angle, 30°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.73 | 33.48E | 329 | 0 | 15.73 | 33.48 | 24.66 | 329 | 0.00 |
| 8 | 15.74 | 33.44 | 332 | 10 | 15.76 | 33.44 | 24.62 | 333 | 0.03 |
| 22 | 15.76 | 33.49E | 329 | 20 | 15.76 | 33.49 | 24.66 | 329 | 0.07 |
| 47 | 15.66 | 33.48E | 328 | 30 | 15.73 | 33.49 | 24.67 | 328 | 0.10 |
| 66 | 15.66 | 33.46E | 329 | 50 | 15.66 | 33.48 | 24.68 | 328 | 0.16 |
| 91 | 13.78 | 33.24E | 307 | 75 | 15.29 | 33.31 | 24.63 | 332 | 0.25 |
| 132 | 10.94 | 33.49E | 237 | 100 | 13.01 | 33.25 | 25.06 | 291 | 0.33 |
| 173 | 9.58 | 33.78E | 193 | 150 | 10.25 | 33.62 | 25.85 | 216 | 0.45 |
| 255 | 8.49 | 34.16E | 148 | 200 | 9.12 | 33.94 | 26.29 | 174 | 0.55 |
| 344 | 7.35 | 34.16E | 132 | 250 | 8.54 | 34.15 | 26.55 | 150 | 0.64 |
| 429 | 6.55 | 34.23E | 117 | 300 | 7.91 | 34.16 | 26.65 | 140 | 0.71 |
| 518 | 6.26 | 34.34E | 105 | 400 | 6.78 | 34.20 | 26.84 | 122 | 0.85 |
| 697 | 5.32 | 34.47E | 84 | 500 | 6.28 | 34.32 | 27.00 | 107 | 0.97 |
| 889 | 4.46 | 34.49E | 73 | 600 | 5.93 | 34.42 | 27.12 | 95 | 1.08 |
| 1085 | 3.72 | 34.56E | 61 | 700 | 5.31 | 34.47 | 27.24 | 84 | 1.17 |
| | | | | 800 | 4.80 | 34.48 | 27.31 | 78 | 1.26 |
| | | | | 1000 | 4.03 | 34.52 | 27.42 | 67 | 1.42 |

105.70

HORIZON; January 17, 1952; 0624 GCT; 29°29'N, 118°54'W; sounding, 1900 fm; wind, 240°, force 2; weather, overcast; sea, very rough; wire angle, 07°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.89 | - | | 0 | 14.89 | (33.39) | (24.78) | (318) | (0.00) |
| 10 | 14.90 | 33.33 | 323 | 10 | 14.90 | 33.33 | 24.73 | 323 | 0.03 |
| 25 | 14.91 | 33.39E | 318 | 20 | 14.91 | 33.38 | 24.76 | 319 | 0.06 |
| 54 | 14.88 | 33.37E | 319 | 30 | 14.91 | 33.39 | 24.77 | 318 | 0.10 |
| 79 | 13.62 | 33.26E | 302 | 50 | 14.89 | 33.38 | 24.77 | 319 | 0.16 |
| 108 | 10.42 | 33.30E | 242 | 75 | 14.00 | 33.27 | 24.87 | 309 | 0.24 |
| 159 | 9.44 | 33.89E | 183 | 100 | 10.91 | 33.28 | 25.47 | 252 | 0.31 |
| 211 | 8.73 | 34.04E | 161 | 150 | 9.58 | 33.83 | 26.13 | 189 | 0.42 |
| 315 | 7.94 | 34.20E | 137 | 200 | 8.89 | 34.02 | 26.39 | 165 | 0.51 |
| 423 | 6.78 | 34.25E | 118 | 250 | 8.38 | 34.11 | 26.54 | 150 | 0.59 |
| 527 | 6.16 | 34.36E | 102 | 300 | 8.02 | 34.18 | 26.65 | 140 | 0.67 |
| 630 | 5.56 | 34.34E | 96 | 400 | 7.01 | 34.24 | 26.84 | 122 | 0.80 |
| 832 | 4.59 | 34.49E | 75 | 500 | 6.27 | 34.34 | 27.02 | 105 | 0.92 |
| 1036 | 3.90 | 34.49E | 68 | 600 | 5.77 | 34.34 | 27.08 | 99 | 1.03 |
| 1234 | 3.39 | 34.52E | 60 | 700 | 5.14 | 34.40 | 27.21 | 87 | 1.13 |
| | | | | 800 | 4.71 | 34.48 | 27.32 | 77 | 1.22 |
| | | | | 1000 | 4.02 | 34.49 | 27.40 | 69 | 1.39 |

105.80

HORIZON; January 17, 1952; 1142 GCT; 29°07'N, 119°35'W; sounding, 200 fm; wind, 150°, force 2; weather, overcast; sea, very rough; wire angle, 12°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.41 | 33.35E | 332 | 0 | 15.41 | 33.35 | 24.63 | 332 | 0.00 |
| 10 | 15.42 | 33.35 | 332 | 10 | 15.42 | 33.35 | 24.63 | 332 | 0.03 |
| 24 | 15.44 | 33.35E | 332 | 20 | 15.43 | 33.35 | 24.63 | 332 | 0.07 |
| 48 | 15.26 | 33.35E | 329 | 30 | 15.41 | 33.35 | 24.63 | 332 | 0.10 |
| 72 | 15.04 | 33.33E | 325 | 50 | 15.23 | 33.35 | 24.67 | 328 | 0.17 |
| 94 | 14.04 | 33.30E | 307 | 75 | 15.02 | 33.32 | 24.69 | 326 | 0.25 |
| 144 | 9.76 | 33.34E | 228 | 100 | 12.91 | 33.30 | 25.12 | 286 | 0.33 |
| 189 | 8.99 | 33.95E | 171 | 150 | 9.62 | 33.36 | 25.76 | 225 | 0.45 |
| 280 | 7.78 | 34.07E | 145 | 200 | 8.81 | 33.97 | 26.36 | 167 | 0.55 |
| 377 | 6.97 | 34.23E | 122 | 250 | 8.12 | 34.02 | 26.51 | 153 | 0.64 |
| 466 | 6.29 | 34.24E | 113 | 300 | 7.56 | 34.11 | 26.66 | 139 | 0.71 |
| 563 | 5.62 | 34.33E | 98 | 400 | 6.80 | 34.24 | 26.87 | 119 | 0.85 |
| 752 | 4.84 | 34.45E | 80 | 500 | 6.02 | 34.26 | 26.99 | 108 | 0.97 |
| 936 | 4.18 | 34.51E | 69 | 600 | 5.45 | 34.37 | 27.14 | 93 | 1.07 |
| 1131 | 3.56 | 34.56E | 59 | 700 | 5.03 | 34.43 | 27.24 | 84 | 1.17 |
| | | | | 800 | 4.68 | 34.47 | 27.31 | 77 | 1.26 |
| | | | | 1000 | 3.97 | 34.53 | 27.44 | 65 | 1.42 |

SIO
CCOFI
5201

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

109.5.34 CREST; January 22, 1952; 2224 GCT;[a] 29°57'N, 116°01'W; sounding, 600 fm; wind, 310°, force 4; weather, partly cloudy; sea, very rough; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.40 | 33.40E | | 328 | | | | | | | |
| 9 | 15.26 | 33.40 | | 325 | | | | | | | |
| 28 | 15.22 | 33.44E | | 321 | | | | | | | |
| 56 | 15.12 | 33.42E | | 321 | | | | | | | |
| 83 | 12.68 | 33.39E | | 275 | | | | | | | |
| 110 | 10.72 | 33.46E | | 235 | | | | | | | |
| 127 | 9.87 | 33.77E | | 198 | | | | | | | |
| 163 | 9.96 | 34.18E | | 169 | | | | | | | |
| 190 | - | 34.14E | | | | | | | | | |
| 218 | 9.42 | 34.25E | | 156 | | | | | | | |
| 236 | 9.35 | 34.25E | | 155 | | | | | | | |
| 246 | 9.18 | 34.25E | | 152 | | | | | | | |

110.33 CREST; January 9, 1952; 1833 GCT; 29°51'N, 115°52'W; sounding, 46 fm; wind, 290°, force 1; weather, partly cloudy; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.42 | 33.51E | 5.61 | 320 | 0 | 15.42 | 33.51 | 5.61 | 24.75 | 320 | 0.00 |
| 10 | 15.33 | 33.40 | 5.60 | 326 | 10 | 15.33 | 33.40 | 5.60 | 24.69 | 326 | 0.03 |
| 20 | 15.31 | 33.46E | 5.63 | 322 | 20 | 15.31 | 33.46 | 5.63 | 24.74 | 322 | 0.06 |
| 30 | 15.28 | 33.48E | 5.59 | 319 | 30 | 15.28 | 33.48 | 5.59 | 24.76 | 319 | 0.10 |
| 50 | 14.31 | 33.44E | 5.10 | 303 | 50 | 14.31 | 33.44 | 5.10 | 24.94 | 303 | 0.16 |

110.35 CREST; January 9, 1952; 1959, 2024 GCT; 29°47'N, 116°00'W; sounding, 700 fm; wind, 270°, force 3; weather, cloudy; sea, moderate; wire angle, 15°, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.84 | 33.53E | 5.61 | 328 | 0 | 15.84 | 33.53 | 5.61 | 24.67 | 328 | 0.00 |
| 9 | 15.79 | 33.41 | 5.61 | 335 | 10 | 15.78 | 33.41 | 5.61 | 24.60 | 335 | 0.03 |
| 24 | 15.73 | 33.49E | 5.61 | 328 | 20 | 15.74 | 33.49 | 5.61 | 24.67 | 328 | 0.07 |
| 48 | 15.69 | 33.49E | 5.58 | 327 | 30 | 15.71 | 33.49 | 5.60 | 24.67 | 328 | 0.10 |
| 72 | 12.32 | 33.35E | 5.11 | 271 | 50 | 15.66 | 33.49 | 5.55 | 24.68 | 327 | 0.16 |
| 95 | 11.15 | 33.54E | 4.40 | 236 | 75 | 12.16 | 33.35 | 5.09 | 25.30 | 268 | 0.24 |
| 145 | 10.46 | 34.05E | 2.14 | 187 | 100 | 11.01 | 33.60 | 4.20 | 25.70 | 230 | 0.30 |
| 191 | 9.74 | 34.27E | 1.51 | 159 | 150 | 10.40 | 34.09 | 2.00 | 26.19 | 183 | 0.41 |
| | | | | | 200 | 9.61 | 34.29 | 1.47 | 26.48 | 156 | 0.49 |
| 280 | 8.86 | 34.34E | 1.02 | 140 | 250 | 9.12 | 34.33 | 1.18 | 26.59 | 145 | 0.57 |
| 376 | 8.00 | 34.38E | 0.60 | 125 | 300 | 8.68 | 34.35 | 0.92 | 26.68 | 137 | 0.64 |
| 466 | 7.08 | 34.42E | 0.38 | 109 | 400 | 7.75 | 34.39 | 0.52 | 26.85 | 121 | 0.78 |
| 561 | 6.31 | 34.42E | 0.31 | 99 | 500 | 6.81 | 34.42 | 0.35 | 27.01 | 106 | 0.90 |
| 654 | 5.57 | 34.45E | 0.29 | 88 | 600 | 6.01 | 34.43 | 0.30 | 27.12 | 95 | 1.01 |
| 757 | 5.00 | 34.47E | 0.32 | 80 | 700 | 5.29 | 34.46 | 0.30 | 27.23 | 84 | 1.11 |
| 951 | 4.22 | 34.49E | 0.50 | 71 | 800 | 4.81 | 34.47 | 0.35 | 27.30 | 78 | 1.20 |
| | | | | | 1000 | (4.06) | (34.50) | (0.56) | (27.40) | (68) | (1.36) |

110.40 CREST; January 9, 1952; 2350 GCT; 29°37'N, 116°19.5'W; sounding, 2560 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 21°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.22 | 33.55E | 5.58 | 334 | 0 | 16.22 | 33.55 | 5.58 | 24.60 | 334 | 0.00 |
| 9 | 16.15 | 33.48 | 5.64 | 338 | 10 | (16.13) | (33.48) | (5.64) | (24.57) | (338) | (0.03) |
| 23 | - | - | 5.60 | | 20 | (16.11) | (33.49) | (5.61) | (24.58) | (336) | (0.07) |
| 47 | 16.10 | 33.53E | 5.62 | 333 | 30 | (16.10) | (33.51) | (5.61) | (24.60) | (335) | (0.10) |
| 69 | 16.04 | 33.55E | 5.58 | 331 | 50 | 16.10 | 33.53 | 5.62 | 24.62 | 333 | 0.17 |
| 93 | 13.74 | 33.37E | 5.45 | 296 | 75 | 16.01 | 33.53 | 5.55 | 24.64 | 331 | 0.25 |
| 144 | 10.62 | 33.57E | 4.07 | 225 | 100 | 13.34 | 33.37 | 5.37 | 25.08 | 289 | 0.33 |
| 187 | 10.52 | 34.25E | - | 173 | 150 | 10.57 | 33.64 | | 25.81 | 219 | 0.46 |

a) Bathythermograph calibration cast.
E Evaporation of salinity samples in storage (see Notes on Particular Cruises).

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m | |
| CREST; January 10, 1952; 0638 GCT; 29°17'N, 116°59'W; sounding, 2000 fm; wind, 030°, force 3; weather, partly cloudy; sea, rough; wire angle, 14°. | | | | | | | | | | | | 110.50 |
| 0 | 16.63 | 33.68E | 5.56 | 334 | 0 | 16.63 | 33.68 | 5.56 | 24.61 | 334 | 0.00 | |
| 10 | 16.63 | 33.60 | 5.48 | 340 | 10 | 16.63 | 33.60 | 5.48 | 24.55 | 340 | 0.03 | |
| 24 | 16.63 | 33.69E | 5.50 | 333 | 20 | 16.63 | 33.68 | 5.50 | 24.61 | 334 | 0.07 | |
| 53 | 16.70 | 33.71E | 5.45 | 333 | 30 | 16.63 | 33.70 | 5.49 | 24.62 | 332 | 0.10 | |
| 77 | 16.70 | 33.75E | 5.45 | 330 | 50 | 16.70 | 33.71 | 5.45 | 24.62 | 333 | 0.17 | |
| 106 | 12.61 | 33.48E | 4.90 | 267 | 75 | 16.70 | 33.75 | 5.45 | 24.65 | 330 | 0.25 | |
| 158 | 10.17 | 33.77E | 3.51 | 203 | 100 | 13.50 | 33.48 | 5.08 | 25.14 | 284 | 0.33 | |
| 208 | 9.36 | 34.05E | 2.98 | 170 | 150 | 10.33 | 33.71 | 3.67 | 25.91 | 210 | 0.45 | |
| | | | | | 200 | 9.43 | 34.01 | 2.99 | 26.29 | 174 | 0.55 | |
| CREST; January 10, 1952; 1223 GCT; 28°57'N, 117°39'W; sounding, 2000 fm; wind, 360°, force 2; weather, cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | | | 110.60 |
| 0 | 16.41 | 33.64E | 5.52 | 332 | 0 | 16.41 | 33.64 | 5.52 | 24.63 | 332 | 0.00 | |
| 10 | 16.40 | 33.55 | 5.48 | 338 | 10 | 16.40 | 33.55 | 5.48 | 24.56 | 338 | 0.03 | |
| 25 | 16.47 | 33.68E | 5.53 | 330 | 20 | 16.44 | 33.67 | 5.52 | 24.64 | 330 | 0.07 | |
| 50 | 16.42 | 33.66E | 5.47 | 331 | 30 | 16.47 | 33.68 | 5.52 | 24.65 | 330 | 0.10 | |
| 75 | 16.43 | 33.66E | 5.48 | 331 | 50 | 16.42 | 33.66 | 5.47 | 24.64 | 331 | 0.17 | |
| 100 | 13.24 | 33.44E | 5.25 | 282 | 75 | 16.43 | 33.66 | 5.48 | 24.64 | 331 | 0.25 | |
| 154 | 10.82 | 33.86E | 3.29 | 207 | 100 | 13.24 | 33.44 | 5.25 | 25.16 | 282 | 0.33 | |
| 201 | 10.68 | 34.20E | 1.81 | 180 | 150 | 10.82 | 33.80 | 3.54 | 25.89 | 212 | 0.45 | |
| | | | | | 200 | 10.69 | 34.20 | 1.83 | 26.23 | 180 | 0.55 | |
| CREST; January 11, 1952; 0407 GCT; 28°36'N, 118°18'W; sounding, 2150 fm; wind, 010°, force 1; weather, partly cloudy; sea, moderate; wire angle, 07°. | | | | | | | | | | | | 110.70 |
| 0 | 15.73 | 33.48E | 5.61 | 329 | 0 | 15.73 | 33.48 | 5.61 | 24.66 | 329 | 0.00 | |
| 10 | 15.74 | 33.37 | 5.58 | 337 | 10 | 15.74 | 33.37 | 5.58 | 24.57 | 337 | 0.03 | |
| 25 | - | 33.48E | 5.61 | | 20 | 15.74 | 33.44 | 5.60 | 24.63 | 332 | 0.07 | |
| 49 | 15.75 | 33.51E | 5.61 | 327 | 30 | 15.74 | 33.50 | 5.61 | 24.67 | 328 | 0.10 | |
| 74 | 15.76 | 33.48E | 5.54 | 330 | 50 | 15.75 | 33.51 | 5.60 | 24.68 | 327 | 0.17 | |
| 98 | 15.74 | 33.48E | 5.59 | 329 | 75 | 15.75 | 33.48 | 5.56 | 24.66 | 329 | 0.25 | |
| 150 | 10.57 | 33.58E | 4.49 | 224 | 100 | 15.71 | 33.48 | 5.58 | 24.66 | 329 | 0.33 | |
| 197 | 9.48 | 33.89E | 3.34 | 183 | 150 | 10.59 | 33.58 | 4.49 | 25.76 | 224 | 0.47 | |
| | | | | | 200 | (9.43) | (33.90) | (3.28) | (26.21) | (182) | (0.57) | |
| CREST; January 11, 1952; 0926 GCT; 28°18'N, 118°54'W; sounding, 2200 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | | | 110.80 |
| 0 | 16.80 | 33.74E | 5.47 | 333 | 0 | 16.80 | 33.74 | 5.47 | 24.61 | 333 | 0.00 | |
| 9 | 16.81 | 33.70 | 5.46 | 336 | 10 | 16.81 | (33.70) | (5.46) | (24.58) | (336) | (0.03) | |
| 24 | - | - | 5.49 | | 20 | 16.82 | (33.75) | (5.48) | (24.62) | (333) | (0.07) | |
| 48 | 16.86 | 33.73E | 5.45 | 335 | 30 | 16.83 | (33.75) | (5.49) | (24.62) | (333) | (0.10) | |
| 73 | 16.82 | 33.74E | 5.42 | 334 | 50 | 16.85 | 33.73 | 5.44 | 24.60 | 335 | 0.17 | |
| 96 | 14.29 | 33.48E | 5.59 | 299 | 75 | 16.81 | 33.74 | 5.43 | 24.61 | 334 | 0.25 | |
| 147 | 10.95 | 33.57E | 4.55 | 231 | 100 | 13.82 | 33.48 | 5.58 | 25.07 | 290 | 0.33 | |
| 191 | 9.02 | 33.80E | 3.70 | 183 | 150 | 10.78 | 33.58 | 4.48 | 25.73 | 227 | 0.46 | |
| 282 | 8.64u | 34.07E | 2.47 | 157 | 200 | 8.90 | 33.84 | 3.56 | 26.25 | 178 | 0.56 | |
| 377 | 6.99 | 34.22E | 1.24 | 123 | 250 | 8.20 | 33.98 | 2.87 | 26.46 | 157 | 0.65 | |
| 466 | 6.26 | 34.25E | 0.72 | 112 | 300 | 7.67 | 34.12 | 2.25 | 26.65 | 140 | 0.73 | |
| 563 | 5.50 | 34.33E | 0.47 | 97 | 400 | 6.80 | 34.23 | 1.06 | 26.86 | 120 | 0.86 | |
| 753 | 4.82 | 34.46E | 0.25 | 79 | 500 | 6.00 | 34.27 | 0.62 | 27.00 | 107 | 0.98 | |
| 943 | 4.06 | 34.52E | 0.55 | 67 | 600 | 5.35 | 34.36 | 0.41 | 27.15 | 93 | 1.09 | |
| 1145 | 3.54 | 34.54E | 0.78 | 60 | 700 | 5.02 | 34.43 | 0.27 | 27.24 | 84 | 1.18 | |
| | | | | | 800 | 4.63 | 34.48 | 0.27 | 27.33 | 76 | 1.27 | |
| | | | | | 1000 | 3.87 | 34.53 | 0.62 | 27.45 | 64 | 1.43 | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **110.90** | CREST; January 11, 1952; 1459 GCT; 28°00'N, 119°28'W; sounding, 2300 fm; wind, 350°, force 4; weather, cloudy; sea, moderate; wire angle, 09°. | | | | | | | | | | |
| 0 | 16.98 | 33.80E | 5.47 | 333 | 0 | 16.98 | 33.80 | 5.47 | 24.62 | 333 | 0.00 |
| 10 | 16.98 | 33.68 | 5.52 | 342 | 10 | 16.98 | 33.68 | 5.52 | 24.53 | 342 | 0.03 |
| 25 | 16.98 | 33.79E | 5.44 | 334 | 20 | 16.98 | 33.74 | 5.48 | 24.57 | 337 | 0.07 |
| 50 | 17.03 | 33.84E | 5.50 | 331 | 30 | 16.99 | 33.81 | 5.47 | 24.62 | 332 | 0.10 |
| 74 | 17.00 | 33.82E | 5.45 | 332 | 50 | 17.03 | 33.84 | 5.50 | 24.64 | 331 | 0.17 |
| 98 | 14.91 | 33.57E | 5.52 | 305 | 75 | 17.00 | 33.82 | 5.46 | 24.63 | 332 | 0.25 |
| 150 | 11.97 | 33.58E | 4.78 | 248 | 100 | 14.71 | 33.56 | 5.52 | 24.95 | 302 | 0.33 |
| 197 | 9.88 | 33.78E | 3.80 | 198 | 150 | 11.97 | 33.58 | 4.78 | 25.51 | 248 | 0.47 |
| | | | | | 200 | (9.82) | (33.78) | (3.78) | (26.05) | (197) | (0.58) |
| **115.27** | CREST; January 12-13, 1952; 2359, 0009 GCT; 29°12'N, 114°56'W; sounding, 40 fm; wind, 330°, force 2; weather, overcast; sea, slight; wire angle, 00°, 00°. | | | | | | | | | | |
| 0 | 15.59 | 33.77E | 5.54 | 305 | 0 | 15.59 | 33.77 | 5.54 | 24.91 | 305 | 0.00 |
| 10 | 15.55 | 33.68 | 5.49 | 311 | 10 | 15.55 | 33.68 | 5.49 | 24.85 | 311 | 0.03 |
| 20 | 15.53 | 33.78E | 5.44 | 303 | 20 | 15.53 | 33.78 | 5.44 | 24.94 | 303 | 0.06 |
| 30 | - | 33.75E | 5.31 | | 30 | 15.46 | 33.75 | 5.31 | 24.93 | 304 | 0.09 |
| | | | | | 50 | 14.99 | 33.73 | 4.01 | 25.02 | 295 | 0.15 |
| 50 | 14.99 | 33.73E | 4.01 | 295 | | | | | | | |
| **115.35** | CREST; January 12, 1952; 2004 GCT; 28°58'N, 115°28'W; sounding, 700 fm; wind, 180°, force 2; weather, cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 15.98 | 33.77E | 5.52 | 313 | 0 | 15.98 | 33.77 | 5.52 | 24.83 | 313 | 0.00 |
| 10 | 15.96 | 33.66 | 5.52 | 321 | 10 | 15.96 | 33.66 | 5.52 | 24.75 | 321 | 0.03 |
| 25 | 15.93 | 33.80E | 5.52 | 310 | 20 | 15.95 | 33.80 | 5.52 | 24.86 | 310 | 0.06 |
| 50 | 15.21 | 33.58E | 5.41 | 311 | 30 | 15.90 | 33.80 | 5.51 | 24.87 | 309 | 0.09 |
| 74 | 13.60 | 33.48E | 4.81 | 286 | 50 | 15.21 | 33.58 | 5.41 | 24.85 | 311 | 0.16 |
| 98 | 11.58 | 33.48E | 4.66 | 248 | 75 | 13.60 | 33.48 | 4.81 | 25.12 | 286 | 0.23 |
| 150 | 9.81 | 33.95E | 2.81 | 184 | 100 | 11.21 | 33.49 | 4.62 | 25.58 | 241 | 0.30 |
| 196 | 9.40 | 34.14E | 1.99 | 164 | 150 | 9.81 | 33.95 | 2.81 | 26.18 | 184 | 0.41 |
| 289 | - | 34.40E | 0.93 | | 200 | 9.39 | 34.16 | 1.91 | 26.42 | 162 | 0.49 |
| 386 | 7.98 | 34.42E | 0.57 | 122 | 250 | 8.98 | 34.35 | 1.28 | 26.63 | 141 | 0.57 |
| 479 | 7.08 | 34.43E | 0.35 | 109 | 300 | 8.61 | 34.40 | 0.88 | 26.73 | 132 | 0.64 |
| 580 | 6.18 | 34.40E | 0.27 | 99 | 400 | 7.84 | 34.42 | 0.52 | 26.86 | 120 | 0.77 |
| 673 | 5.58 | 34.43E | 0.33 | 90 | 500 | 6.87 | 34.42 | 0.33 | 27.00 | 107 | 0.90 |
| 769 | 4.96 | 34.51E | 0.26 | 77 | 600 | 6.04 | 34.40 | 0.28 | 27.10 | 98 | 1.01 |
| 971 | 4.16 | 34.51E | 0.54 | 69 | 700 | 5.40 | 34.45 | 0.31 | 27.21 | 86 | 1.11 |
| | | | | | 800 | 4.80 | 34.51 | 0.27 | 27.33 | 75 | 1.19 |
| | | | | | 1000 | (4.09) | (34.51) | (0.61) | (27.41) | (68) | (1.36) |
| **115.40** | CREST; January 12, 1952; 1651 GCT; 28°45'N, 115°47'W; sounding, 840 fm; wind, 210°, force 1; weather, cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 16.18 | 33.66E | 5.53 | 326 | 0 | 16.18 | 33.66 | 5.53 | 24.70 | 326 | 0.00 |
| 10 | 16.17 | 33.51 | 5.51 | 336 | 10 | 16.17 | 33.51 | 5.51 | 24.58 | 336 | 0.03 |
| 25 | 15.95 | 33.58E | 5.69 | 326 | 20 | 16.01 | 33.57 | 5.64 | 24.67 | 328 | 0.07 |
| 50 | 15.85 | 33.54E | 5.60 | 327 | 30 | 15.93 | 33.58 | 5.69 | 24.69 | 326 | 0.10 |
| 75 | 13.10 | 33.43E | 5.07 | 280 | 50 | 15.85 | 33.54 | 5.60 | 24.68 | 327 | 0.16 |
| 99 | 12.46 | 33.62E | 3.83 | 254 | 75 | 13.10 | 33.43 | 5.07 | 25.18 | 280 | 0.24 |
| 154 | 11.26 | 34.05E | 2.32 | 201 | 100 | 12.43 | 33.63 | 3.80 | 25.46 | 253 | 0.31 |
| 203 | 10.24 | 34.33E | 1.56 | 163 | 150 | 11.39 | 34.02 | 2.43 | 25.96 | 205 | 0.42 |
| | | | | | 200 | 10.32 | 34.32 | 1.61 | 26.39 | 165 | 0.52 |
| **115.50** | CREST; January 12, 1952; 1131 GCT; 28°21'N, 116°24'W; sounding, 2200 fm; wind, 300°, force 1; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 16.71 | 33.87E | 5.45 | 322 | 0 | 16.71 | 33.87 | 5.45 | 24.74 | 322 | 0.00 |
| 10 | 16.72 | 33.91 | 5.42 | 319 | 10 | 16.72 | 33.91 | 5.42 | 24.76 | 319 | 0.03 |
| 25 | - | 33.91E | 5.41 | | 20 | 16.74 | 33.91 | 5.41 | 24.76 | 320 | 0.06 |
| 50 | 16.83 | 33.91E | 5.40 | 322 | 30 | 16.79 | 33.91 | 5.41 | 24.75 | 321 | 0.10 |
| 75 | 16.83 | 33.89E | 5.35 | 323 | 50 | 16.83 | 33.91 | 5.40 | 24.74 | 322 | 0.16 |
| 99 | 13.93 | 33.69E | 4.13 | 277 | 75 | 16.83 | 33.89 | 5.35 | 24.72 | 323 | 0.24 |
| 153 | 11.64 | 34.02E | 2.36 | 210 | 100 | 13.87 | 33.69 | 4.11 | 25.22 | 276 | 0.32 |
| 200 | 9.33 | 33.93E | 3.09 | 178 | 150 | 11.80 | 34.02 | 2.36 | 25.89 | 212 | 0.44 |
| | | | | | 200 | 9.33 | 33.93 | 3.09 | 26.25 | 178 | 0.54 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m | |
| CREST; January 12, 1952; 0612 GCT; 28°05'N, 117°05'W; sounding, 2200 fm; wind, 300°, force 2; weather, cloudy; sea, rough; wire angle, 08°. | | | | | | | | | | | | 115.60 |
| 0 | 17.20 | 33.98E | 5.46 | 325 | 0 | 17.20 | 33.98 | 5.46 | 24.70 | 325 | 0.00 | |
| 10 | 17.19 | 33.93 | 5.48 | 328 | 10 | 17.19 | 33.93 | 5.48 | 24.67 | 328 | 0.03 | |
| 25 | 16.97 | - | 5.42 | | 20 | 17.18 | 34.01 | 5.45 | 24.73 | 322 | 0.07 | |
| 51 | 17.12 | 33.95E | 5.39 | 325 | 30 | 17.16 | 34.02 | 5.41 | 24.74 | 321 | 0.10 | |
| 74 | 13.72 | 33.55E | 4.63 | 283 | 50 | 17.12 | 33.98 | 5.40 | 24.72 | 323 | 0.16 | |
| 99 | 12.12 | 33.64E | 4.00 | 246 | 75 | 13.70 | 33.55 | 4.62 | 25.15 | 282 | 0.24 | |
| 152 | 10.68 | 34.04E | 2.55 | 192 | 100 | 12.10 | 33.65 | 3.99 | 25.54 | 245 | 0.30 | |
| 199 | 10.22 | 34.23E | 1.94 | 170 | 150 | 10.71 | 34.03 | 2.60 | 26.09 | 193 | 0.42 | |
| | | | | | 200 | (10.21) | (34.23) | (1.94) | (26.34) | (170) | (0.51) | |
| CREST; January 12, 1952; 0053 GCT; 27°45'N, 117°44'W; sounding, 2250 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | | | 115.70 |
| 0 | 16.62 | 33.64E | 5.56 | 337 | 0 | 16.62 | 33.64 | 5.56 | 24.58 | 337 | 0.00 | |
| 10 | 16.57 | 33.60 | 5.53 | 338 | 10 | 16.57 | 33.60 | 5.53 | 24.56 | 338 | 0.03 | |
| 25 | 16.51 | 33.66E | 5.54 | 333 | 20 | 16.51 | 33.65 | 5.54 | 24.61 | 333 | 0.07 | |
| 50 | 16.53 | 33.64E | 5.49 | 335 | 30 | 16.51 | 33.66 | 5.53 | 24.62 | 333 | 0.10 | |
| 75 | 16.50 | 33.69E | 5.49 | 330 | 50 | 16.53 | 33.64 | 5.49 | 24.60 | 335 | 0.17 | |
| 99 | 13.78 | 33.44E | 5.41 | 292 | 75 | 16.50 | 33.69 | 5.49 | 24.65 | 330 | 0.25 | |
| 152 | 11.60 | 33.85E | 3.16 | 221 | 100 | 13.70 | 33.44 | 5.40 | 25.06 | 291 | 0.33 | |
| 204 | 10.50 | 34.22E | 2.03 | 175 | 150 | 11.67 | 33.80 | 3.21 | 25.74 | 226 | 0.46 | |
| | | | | | 200 | 10.59 | 34.20 | 2.13 | 26.25 | 178 | 0.56 | |
| CREST; January 13, 1952; 0634 GCT; 28°22.5'N, 114°15.5'W; sounding, 32 fm; wind, 130°, force 2; weather, cloudy; sea, smooth; wire angle, 00°. | | | | | | | | | | | | 120.25 |
| 0 | 16.44 | 33.91E | 5.43 | 313 | 0 | 16.44 | 33.91 | 5.43 | 24.83 | 313 | 0.00 | |
| 10 | 16.43 | 33.78 | 5.39 | 322 | 10 | 16.43 | 33.78 | 5.39 | 24.73 | 322 | 0.03 | |
| 20 | 16.45 | 33.86E | 5.35 | 317 | 20 | 16.45 | 33.86 | 5.35 | 24.79 | 317 | 0.06 | |
| 30 | - | 33.86E | 5.35 | | 30 | 16.3 | 33.86 | 5.35 | 24.82 | 314 | 0.10 | |
| CREST; January 13, 1952; 0904 GCT; 28°13'N, 114°34'W; sounding, 53 fm; wind, 090°, force 1; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | | 120.30 |
| 0 | 16.79 | 33.89E | 5.22 | 322 | 0 | 16.79 | 33.89 | 5.22 | 24.73 | 322 | 0.00 | |
| 10 | 16.78 | 33.91 | 5.32 | 320 | 10 | 16.78 | 33.91 | 5.32 | 24.75 | 320 | 0.03 | |
| 20 | 16.54 | 33.87E | 5.26 | 318 | 20 | 16.54 | 33.87 | 5.26 | 24.78 | 318 | 0.06 | |
| 30 | 16.46 | 33.86E | 5.31 | 317 | 30 | 16.46 | 33.86 | 5.31 | 24.79 | 317 | 0.10 | |
| 50 | 16.41 | 33.87E | 5.30 | 315 | 50 | 16.41 | 33.87 | 5.30 | 24.81 | 315 | 0.16 | |
| 75 | 16.30 | 33.89E | 5.28 | 311 | 75 | 16.30 | 33.89 | 5.28 | 24.85 | 311 | 0.24 | |
| CREST; January 13, 1952; 1136 GCT; 28°03'N, 114°54'W; sounding, 45 fm; wind, 340°, force 1; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | | 120.35 |
| 0 | 16.55 | 33.91E | 5.19 | 315 | 0 | 16.55 | 33.91 | 5.19 | 24.80 | 315 | 0.00 | |
| 10 | 16.63 | 33.91 | 5.28 | 317 | 10 | 16.63 | 33.91 | 5.28 | 24.78 | 317 | 0.03 | |
| 20 | 16.56 | 33.96E | 5.22 | 312 | 20 | 16.56 | 33.96 | 5.22 | 24.84 | 312 | 0.06 | |
| 30 | 16.54 | 33.93E | 5.12 | 314 | 30 | 16.54 | 33.93 | 5.12 | 24.82 | 314 | 0.09 | |
| 50 | - | 33.87E | 5.19 | | 50 | | 33.87 | 5.19 | | | | |
| CREST; January 13, 1952; 1625 GCT; 27°43'N, 115°33'W; sounding, 1250 fm; wind, 270°, force 2; weather, drizzle; sea, slight; wire angle, 09°. | | | | | | | | | | | | 120.45 |
| 0 | 17.36 | 33.93E | 5.49 | 332 | 0 | 17.36 | 33.93 | 5.49 | 24.63 | 332 | 0.00 | |
| 10 | 17.36 | 33.89 | 5.45 | 335 | 10 | 17.36 | 33.89 | 5.45 | 24.60 | 335 | 0.03 | |
| 25 | - | 33.89E | 5.39 | | 20 | 17.37 | 33.89 | 5.42 | 24.60 | 335 | 0.07 | |
| 50 | 17.39 | 33.98E | 5.35 | 329 | 30 | 17.38 | 33.89 | 5.39 | 24.59 | 335 | 0.10 | |
| 74 | 17.41 | 33.95E | 5.32 | 332 | 50 | 17.39 | 33.98 | 5.35 | 24.66 | 329 | 0.17 | |
| | | | | | 75 | (17.40) | (33.95) | (5.31) | (24.63) | (332) | (0.25) | |

S10

CCOFI 5201

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **120.50** | CREST; January 13, 1952; 1936 GCT; 27°32'N, 115°52'W; sounding, 1936 fm; wind, 250°, force 4; weather, cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 17.58 | 33.98E | 5.42 | 333 | 0 | 17.58 | 33.98 | 5.42 | 24.61 | 333 | 0.00 |
| 10 | 17.56 | 33.89 | 5.41 | 340 | 10 | 17.56 | 33.89 | 5.41 | 24.55 | 340 | 0.03 |
| 25 | - | 34.00E | 5.40 | | 20 | 17.51 | 33.98 | 5.40 | 24.63 | 332 | 0.07 |
| 50 | 17.42 | 34.03E | 5.41 | 326 | 30 | 17.48 | 34.01 | 5.40 | 24.66 | 329 | 0.10 |
| 74 | 17.48 | 34.03E | 5.38 | 328 | 50 | 17.42 | 34.03 | 5.41 | 24.69 | 326 | 0.17 |
| 98 | 13.02 | 33.57E | 4.74 | 268 | 75 | 17.48 | 34.03 | 5.38 | 24.68 | 328 | 0.25 |
| 148 | 10.64 | 34.13E | 2.42 | 184 | 100 | 12.50 | 33.57 | 4.58 | 25.40 | 258 | 0.32 |
| 195 | 10.66 | 34.34E | 1.37 | 169 | 150 | 10.65 | 34.14 | 2.38 | 26.19 | 184 | 0.43 |
| | | | | | 200 | (10.60) | (34.36) | (1.37) | (26.37) | (167) | (0.52) |
| **120.60** | CREST; January 14, 1952; 0050 GCT; 27°12'N, 116°13'W; sounding, 2100 fm; wind, 330°, force 5; weather, drizzle; sea, very rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 17.84 | 33.96E | 5.41 | 341 | 0 | 17.84 | 33.96 | 5.41 | 24.54 | 341 | 0.00 |
| 9 | 17.85 | 33.95 | 5.41 | 342 | 10 | 17.85 | 33.95 | 5.41 | 24.53 | 342 | 0.03 |
| 23 | 17.84 | 33.96E | 5.40 | 341 | 20 | 17.85 | 33.96 | 5.41 | 24.53 | 341 | 0.07 |
| 51 | 17.80 | 33.99E | 5.38 | 338 | 30 | 17.84 | 33.97 | 5.40 | 24.54 | 340 | 0.10 |
| 74 | 15.02 | 33.78E | 4.76 | 292 | 50 | 17.80 | 33.99 | 5.38 | 24.57 | 338 | 0.17 |
| 100 | 12.40 | 33.88E | 3.06 | 234 | 75 | 14.95 | 33.78 | 4.75 | 25.06 | 291 | 0.25 |
| 148 | 10.66 | 34.14E | 2.13 | 184 | 100 | 12.40 | 33.88 | 3.06 | 25.66 | 234 | 0.32 |
| 195 | 9.62 | 34.20E | 2.02 | 163 | 150 | 10.55 | 34.14 | 2.12 | 26.21 | 182 | 0.42 |
| | | | | | 200 | (9.57) | (34.21) | (2.01) | (26.43) | (161) | (0.51) |
| **120.70** | CREST; January 14, 1952; 0629 GCT; 26°52'N, 117°10'W; sounding, 2250 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 08°. | | | | | | | | | | |
| 0 | 17.34 | 34.02E | 5.40 | 325 | 0 | 17.34 | 34.02 | 5.40 | 24.70 | 325 | 0.00 |
| 9 | 17.34 | 33.97 | 5.44 | 329 | 10 | 17.32 | 33.97 | 5.44 | 24.67 | 328 | 0.03 |
| 25 | - | 34.07E | 5.44 | | 20 | 17.29 | 34.04 | 5.44 | 24.73 | 322 | 0.07 |
| 36 | 17.22 | 34.00E | 5.40 | 324 | 30 | 17.24 | 34.06 | 5.42 | 24.76 | 320 | 0.10 |
| 79 | 12.56 | 33.66E | 4.16 | 253 | 50 | 17.15 | 33.83 | 5.29 | 24.60 | 335 | 0.16 |
| 108 | 11.54 | 33.96E | 2.67 | 212 | 75 | 12.79 | 33.66 | 4.72 | 25.42 | 257 | 0.24 |
| 161 | 10.93 | 34.40E | 1.35 | 169 | 100 | 11.80 | 33.89 | 2.83 | 25.79 | 222 | 0.30 |
| 213 | 9.54 | 34.33E | 1.53 | 152 | 150 | 10.50 | 34.20 | 2.10 | 26.26 | 177 | 0.40 |
| | | | | | 200 | 9.71 | 34.31 | 1.63 | 26.48 | 156 | 0.48 |
| **120.80** | CREST; January 14, 1952; 1157 GCT; 26°32'N, 117°49'W; sounding, 1157 fm; wind, 330°, force 3; weather, cloudy; sea, very rough; wire angle, 18°. | | | | | | | | | | |
| 0 | 17.34 | 34.07E | 5.40 | 321 | 0 | 17.34 | 34.07 | 5.40 | 24.74 | 321 | 0.00 |
| 10 | 17.33 | 34.00 | 5.45 | 326 | 10 | 17.33 | 34.00 | 5.45 | 24.69 | 326 | 0.03 |
| 24 | 17.33 | 34.07E | 5.42 | 321 | 20 | 17.33 | 34.05 | 5.42 | 24.73 | 323 | 0.06 |
| 48 | 17.37 | 34.11E | 5.55 | 319 | 30 | 17.36 | 34.09 | 5.45 | 24.75 | 320 | 0.10 |
| 72 | 17.35 | 34.07E | 5.37 | 322 | 50 | 17.36 | 34.11 | 5.55 | 24.77 | 319 | 0.16 |
| 94 | 14.20 | 33.58E | 5.27 | 290 | 75 | 17.32 | 34.04 | 5.37 | 24.72 | 323 | 0.24 |
| 144 | 10.80 | 33.93E | 3.02 | 202 | 100 | 13.53 | 33.65 | 5.20 | 25.26 | 272 | 0.32 |
| 187 | 9.38 | 34.04E | 3.16 | 171 | 150 | 10.50 | 33.95 | 3.02 | 26.07 | 195 | 0.44 |
| **120.90** | CREST; January 14, 1952; 1715 GCT; 26°10'N, 118°35'W; sounding, 2300 fm; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 07°. | | | | | | | | | | |
| 0 | 17.28 | 33.95E | 5.38 | 329 | 0 | 17.28 | 33.95 | 5.38 | 24.66 | 329 | 0.00 |
| 10 | 17.28 | 33.87 | 5.40 | 335 | 10 | 17.28 | 33.87 | 5.40 | 24.60 | 335 | 0.03 |
| 25 | - | 33.94E | 5.40 | | 20 | 17.28 | 33.92 | 5.40 | 24.64 | 331 | 0.07 |
| 50 | 17.29 | 33.93E | 5.39 | 330 | 30 | 17.28 | 33.94 | 5.40 | 24.65 | 330 | 0.10 |
| 75 | 17.00 | 33.93E | 5.35 | 324 | 50 | 17.29 | 33.93 | 5.39 | 24.64 | 330 | 0.17 |
| 100 | 12.96 | 33.66E | 4.17 | 260 | 75 | 17.00 | 33.93 | 5.35 | 24.71 | 324 | 0.25 |
| 153 | 10.61 | 34.02E | 2.68 | 192 | 100 | 12.96 | 33.66 | 4.17 | 25.38 | 260 | 0.32 |
| 201 | 9.56 | 34.19E | 1.98 | 162 | 150 | 10.72 | 34.01 | 2.72 | 26.07 | 194 | 0.44 |
| | | | | | 200 | 9.58 | 34.19 | 2.00 | 26.41 | 163 | 0.53 |
| **123.37** | CREST; January 16, 1952; 0644 GCT; 27°23'N, 114°42'W; sounding, 40 fm; wind, 320°, force 3; weather, partly cloudy; sea, smooth; wire angle, 00°. | | | | | | | | | | |
| 0 | 17.94 | 34.09E | 5.33 | 334 | 0 | 17.94 | 34.09 | 5.33 | 24.61 | 334 | 0.00 |
| 10 | 17.92 | 34.05 | 5.32 | 336 | 10 | 17.92 | 34.05 | 5.32 | 24.58 | 336 | 0.03 |
| 20 | 17.94 | 34.09E | 5.34 | 334 | 20 | 17.94 | 34.09 | 5.34 | 24.61 | 334 | 0.07 |
| 30 | 17.94 | 34.09E | 5.30 | 334 | 30 | 17.94 | 34.09 | 5.30 | 24.61 | 334 | 0.10 |
| 50 | 17.94 | 34.11E | 4.95 | 332 | 50 | 17.94 | 34.11 | 4.95 | 24.63 | 332 | 0.17 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m | |
| CREST; January 15, 1952; 1921 GCT; 27°22.5'N, 114°48'W; sounding, 60 fm; wind, 340°, force 4; weather, partly cloudy; sea, slight; wire angle, 06°. | | | | | | | | | | | | 123.40 |
| 0 | 17.89 | 34.05E | 5.34 | 336 | 0 | 17.89 | 34.05 | 5.34 | 24.59 | 336 | 0.00 | |
| 10 | 17.88 | 34.05 | 5.35 | 335 | 10 | 17.88 | 34.05 | 5.35 | 24.59 | 335 | 0.03 | |
| 20 | 17.89 | 34.07E | 5.32 | 334 | 20 | 17.89 | 34.07 | 5.32 | 24.61 | 334 | 0.07 | |
| 30 | - | 34.07E | 5.37 | | 30 | (17.90) | 34.07 | 5.37 | (24.60) | (334) | (0.10) | |
| 50 | - | 34.09E | 5.33 | | 50 | (17.90) | 34.09 | 5.33 | (24.62) | (333) | (0.17) | |
| 74 | 13.74 | - | 4.86 | | 75 | (13.72) | | (4.84) | | | | |
| CREST; January 15, 1952; 1334 GCT; 27°03'N, 115°34'W; sounding, 2000 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 09°. | | | | | | | | | | | | 123.50 |
| 0 | 17.60 | 33.96E | 5.38 | 335 | 0 | 17.60 | 33.96 | 5.38 | 24.59 | 335 | 0.00 | |
| 10 | 17.62 | 33.95 | 5.36 | 337 | 10 | 17.62 | 33.95 | 5.36 | 24.58 | 337 | 0.03 | |
| 26 | 17.62 | 34.02E | 5.37 | 331 | 20 | 17.62 | 33.99 | 5.37 | 24.61 | 334 | 0.07 | |
| 50 | 17.64 | 34.04E | 5.36 | 330 | 30 | 17.62 | 34.03 | 5.37 | 24.64 | 331 | 0.10 | |
| 74 | 17.12 | 33.95E | 5.36 | 325 | 50 | 17.64 | 34.04 | 5.36 | 24.64 | 330 | 0.17 | |
| 100 | 12.26 | 33.49E | 4.66 | 260 | 75 | 16.50 | 33.92 | 5.36 | 24.82 | 314 | 0.25 | |
| 153 | 10.46 | 33.95E | 2.73 | 195 | 100 | 12.26 | 33.49 | 4.66 | 25.39 | 260 | 0.32 | |
| 202 | 9.92 | 34.20E | 2.04 | 167 | 150 | 10.50 | 33.90 | 2.80 | 26.03 | 199 | 0.44 | |
| | | | | | 200 | 9.95 | 34.19 | 2.08 | 26.35 | 168 | 0.53 | |
| CREST; January 15, 1952; 0711, 0729 GCT; 26°38'N, 116°09'W; sounding, 2000 fm; wind, 350°, force 2; weather, partly cloudy; sea, moderate; wire angle, 09°, 12°. | | | | | | | | | | | | 123.60 |
| 0 | 17.42 | 34.00E | 5.41 | 328 | 0 | 17.42 | 34.00 | 5.41 | 24.67 | 328 | 0.00 | |
| 10 | 17.41 | 33.95 | 5.40 | 332 | 10 | 17.41 | 33.95 | 5.40 | 24.63 | 332 | 0.03 | |
| 24 | 17.41 | 34.02E | 5.45 | 327 | 20 | 17.41 | 34.00 | 5.44 | 24.67 | 328 | 0.07 | |
| 49 | 17.59 | 34.09E | 5.35 | 326 | 30 | 17.43 | 34.04 | 5.43 | 24.70 | 326 | 0.10 | |
| | | | | | 50 | 17.59 | 34.09 | 5.35 | 24.70 | 326 | 0.16 | |
| 73 | 17.54 | 34.08E | 5.25 | 325 | 75 | 17.53 | 34.08 | 5.22 | 24.70 | 325 | 0.25 | |
| 99 | 12.54 | 33.75E | 3.69 | 246 | 100 | 12.45 | 33.75 | 3.51 | 25.55 | 244 | 0.32 | |
| 151 | 10.88 | 34.18E | 1.76 | 185 | 150 | 10.90 | 34.18 | 1.77 | 26.18 | 185 | 0.43 | |
| 199 | 10.00 | 34.25E | 1.66 | 165 | 200 | (10.00) | (34.26) | (1.64) | (26.39) | (164) | (0.52) | |
| CREST; January 16, 1952; 1139 GCT; 26°55.5'N, 114°05'W; sounding, 37 fm; wind, 360°, force 4; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | | 127.34 |
| 0 | 17.84 | 34.13E | 5.25 | 329 | 0 | 17.84 | 34.13 | 5.25 | 24.67 | 329 | 0.00 | |
| 10 | 17.84 | 34.09 | 5.22 | 331 | 10 | 17.84 | 34.09 | 5.22 | 24.63 | 331 | 0.03 | |
| 20 | 17.85 | 34.11E | 5.18 | 330 | 20 | 17.85 | 34.11 | 5.18 | 24.65 | 330 | 0.07 | |
| 30 | 17.88 | 34.20E | 4.99 | 324 | 30 | 17.88 | 34.20 | 4.99 | 24.71 | 324 | 0.10 | |
| CREST; January 16, 1952; 1528 GCT; 26°46'N, 114°29'W; sounding, 1900 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 08°. | | | | | | | | | | | | 127.40 |
| 0 | 17.68 | 34.13E | 5.37 | 325 | 0 | 17.68 | 34.13 | 5.37 | 24.70 | 325 | 0.00 | |
| 10 | 17.68 | 33.96 | 5.36 | 337 | 10 | 17.68 | 33.96 | 5.36 | 24.57 | 337 | 0.03 | |
| 25 | 17.64 | 34.13E | 5.36 | 324 | 20 | 17.66 | 34.12 | 5.36 | 24.70 | 325 | 0.07 | |
| 52 | 17.60 | 34.09E | 5.35 | 326 | 30 | 17.63 | 34.13 | 5.36 | 24.72 | 324 | 0.10 | |
| 77 | 13.96 | 33.53E | 5.26 | 289 | 50 | 17.60 | 34.10 | 5.35 | 24.70 | 325 | 0.16 | |
| 101 | 12.34 | 33.57E | 4.42 | 255 | 75 | 14.27 | 33.53 | 5.27 | 25.02 | 295 | 0.24 | |
| 153 | 10.38 | 34.11E | 2.53 | 181 | 100 | 12.44 | 33.56 | 4.49 | 25.41 | 258 | 0.31 | |
| 201 | 10.30 | 34.44E | 1.23 | 156 | 150 | 10.40 | 34.08 | 2.70 | 26.19 | 184 | 0.42 | |
| | | | | | 200 | 10.31 | 34.43 | 1.28 | 26.47 | 157 | 0.51 | |

SIO

CCOFI
5201

| | OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 127.50 | CREST; January 16, 1952; 2053 GCT; 26°21'N, 115°07'W; sounding, 1600 fm; wind, 330°, force 1; weather, cloudy; sea, very rough; wire angle, 09°. | | | | | | | | | | | |
| | 0 | 17.87 | 34.00E | 5.35 | 339 | 0 | 17.87 | 34.00 | 5.35 | 24.56 | 339 | 0.00 |
| | 10 | 17.86 | 33.89 | 5.35 | 346 | 10 | 17.86 | 33.89 | 5.35 | 24.48 | 346 | 0.03 |
| | 25 | 17.88 | 34.02E | 5.34 | 337 | 20 | 17.88 | 33.95 | 5.35 | 24.52 | 343 | 0.07 |
| | 49 | 17.88 | 34.08E | 5.34 | 333 | 30 | 17.88 | 34.06 | 5.34 | 24.60 | 335 | 0.10 |
| | 73 | 17.70 | 33.97E | 5.32 | 337 | 50 | 17.88 | 34.08 | 5.34 | 24.62 | 333 | 0.17 |
| | 98 | 14.00 | 33.49E | 5.33 | 293 | 75 | 17.69 | 33.95 | 5.32 | 24.56 | 338 | 0.25 |
| | 149 | 11.00 | 34.04E | 2.62 | 197 | 100 | 13.41 | 33.49 | 5.33 | 25.16 | 281 | 0.33 |
| | 194 | 10.30 | 34.31E | 1.61 | 165 | 150 | 10.98 | 34.05 | 2.60 | 26.06 | 196 | 0.45 |
| | 283 | - | 34.58E | 0.57 | | 200 | (10.22) | 34.34 | 1.52 | (26.42) | (162) | (0.54) |
| | 378 | 8.29 | 34.51E | 0.37 | 119 | 250 | (9.64) | 34.55 | 0.80 | (26.68) | (137) | (0.62) |
| | 469 | 7.20 | 34.52E | 0.28 | 103 | 300 | (9.12) | 34.57 | 0.52 | (26.78) | (127) | (0.69) |
| | 566 | 6.37 | 34.49E | 0.23 | 95 | 400 | 8.00 | 34.51 | 0.33 | 26.91 | 115 | (0.82) |
| | 755 | 5.21 | 34.51E | 0.29 | 80 | 500 | 6.91 | 34.52 | 0.27 | 27.07 | 100 | (0.93) |
| | 947 | 4.42 | - | 0.58 | | 600 | 6.12 | 34.49 | 0.23 | 27.16 | 92 | (1.04) |
| | 1148 | 3.81 | 34.60E | 0.64 | 58 | 700 | 5.51 | 34.50 | 0.27 | 27.24 | 84 | (1.13) |
| | | | | | | 800 | 5.00 | 34.52 | 0.33 | 27.32 | 77 | (1.22) |
| | | | | | | 1000 | 4.25 | 34.57 | 0.62 | 27.44 | 65 | (1.38) |
| 127.60 | CREST; January 17, 1952; 0257, 0312 GCT; 26°00'N, 115°44'W; sounding, 2130 fm; wind, 010°, force 3; weather, overcast; sea, very rough; wire angle, 12°, 13°. | | | | | | | | | | | |
| | 0 | 18.62 | 34.10E | 5.29 | 349 | 0 | 18.62 | 34.10 | 5.29 | 24.45 | 349 | 0.00 |
| | 10 | 18.62 | 34.05 | 5.30 | 353 | 10 | 18.62 | 34.05 | 5.30 | 24.41 | 353 | 0.04 |
| | | | | | | 20 | 18.60 | 34.05 | 5.31 | 24.42 | 352 | 0.07 |
| | 26 | 18.56 | 34.05E | 5.31 | 351 | 30 | 18.53 | 34.05 | 5.31 | 24.43 | 351 | 0.11 |
| | 48 | 18.44 | 34.07E | 5.31 | 347 | 50 | 18.43 | 34.07 | 5.32 | 24.47 | 347 | 0.18 |
| | 75 | 18.34 | 34.04E | 5.32 | 347 | 75 | 18.34 | 34.04 | 5.32 | 24.47 | 347 | 0.26 |
| | 96 | 15.00 | 33.62E | 5.41 | 303 | 100 | 14.26 | 33.62 | 5.40 | 25.09 | 288 | 0.34 |
| | 145 | 11.14 | 33.78E | 3.99 | 219 | 150 | 11.12 | 33.83 | 3.25 | 25.86 | 215 | 0.47 |
| | 189 | 10.90 | 34.29E | 1.52 | 177 | 200 | 10.79 | 34.34 | 1.38 | 26.32 | 171 | 0.57 |
| | 278 | 9.37 | 34.43E | 0.87 | 142 | 250 | 9.88 | 34.42 | 1.00 | 26.54 | 150 | 0.65 |
| | 459 | 7.41 | 34.51E | 0.25 | 107 | 300 | 9.07 | 34.43 | 0.82 | 26.68 | 137 | 0.73 |
| | 553 | 6.61 | 34.49E | 0.21 | 98 | 400 | 7.94 | 34.45 | 0.43 | 26.87 | 119 | 0.86 |
| | 740 | 5.24 | 34.48E | 0.26 | 82 | 500 | 7.05 | 34.51 | 0.21 | 27.05 | 102 | 0.98 |
| | 928 | 4.40 | 34.51E | 0.41 | 71 | 600 | 6.25 | 34.49 | 0.21 | 27.14 | 93 | 1.08 |
| | 1127 | 3.81 | 34.54E | 0.63 | 63 | 700 | 5.52 | 34.48 | 0.23 | 27.22 | 86 | 1.18 |
| | | | | | | 800 | 4.92 | 34.49 | 0.30 | 27.30 | 78 | 1.27 |
| | | | | | | 1000 | 4.18 | 34.52 | 0.49 | 27.41 | 68 | 1.44 |
| 130.30 | CREST; January 18, 1952; 2118 GCT; 26°15'N, 113°23'W; sounding, 41 fm; wind, 310°, force 4; weather, partly cloudy; sea, slight; wire angle, 01°. | | | | | | | | | | | |
| | 0 | 19.54 | 34.54E | 5.10 | 339 | 0 | 19.54 | 34.54 | 5.10 | 24.55 | 339 | 0.00 |
| | 10 | 19.46 | 34.53 | 5.06 | 338 | 10 | 19.46 | 34.53 | 5.06 | 24.56 | 338 | 0.03 |
| | 20 | 19.40 | 34.56E | 5.02 | 335 | 20 | 19.40 | 34.56 | 5.02 | 24.60 | 335 | 0.07 |
| | 30 | 19.38 | 34.56E | 4.96 | 334 | 30 | 19.38 | 34.56 | 4.96 | 24.61 | 334 | 0.10 |
| | 50 | 19.29 | 34.51E | 4.88 | 335 | 50 | 19.29 | 34.51 | 4.88 | 24.59 | 335 | 0.17 |
| 130.35 | CREST; January 18, 1952; 1920 GCT; 26°10'N, 113°34'W; sounding, 60 fm; wind, 340°, force 4; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | | |
| | 0 | 19.58 | 34.52E | 5.14 | 342 | 0 | 19.58 | 34.52 | 5.14 | 24.53 | 342 | 0.00 |
| | 10 | 19.59 | 34.49 | 5.20 | 344 | 10 | 19.59 | 34.49 | 5.20 | 24.50 | 344 | 0.03 |
| | 20 | 19.46 | 34.49E | 5.06 | 341 | 20 | 19.46 | 34.49 | 5.06 | 24.53 | 341 | 0.07 |
| | 30 | 19.14 | 34.45E | 5.02 | 336 | 30 | 19.14 | 34.45 | 5.02 | 24.59 | 336 | 0.10 |
| | 50 | 18.10 | 34.25E | 4.52 | 326 | 50 | 18.10 | 34.25 | 4.52 | 24.69 | 326 | 0.17 |
| | 75 | - | 34.07E | 3.37 | | 75 | | 34.07 | 3.37 | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; January 18, 1952; 1214 GCT; 26°10.5'N, 114°07'W; sounding, 1000 fm; wind, 250°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | | 130.40 |
| 0 | 19.71 | 34.56E | 5.17 | 342 | 0 | 19.71 | 34.56 | 5.17 | 24.52 | 342 | 0.00 |
| 10 | 19.70 | 34.51 | 5.17 | 346 | 10 | 19.70 | 34.51 | 5.17 | 24.49 | 346 | 0.03 |
| 24 | 19.67 | 34.60E | 5.17 | 338 | 20 | 19.68 | 34.59 | 5.17 | 24.55 | 339 | 0.07 |
| 48 | 19.12 | 34.43E | 5.15 | 337 | 30 | 19.63 | 34.58 | 5.16 | 24.56 | 339 | 0.10 |
| 72 | 17.90 | 34.29E | 4.58 | 318 | 50 | 19.00 | 34.42 | 5.15 | 24.60 | 335 | 0.17 |
| 96 | 14.11 | 33.80E | 4.19 | 272 | 75 | 16.80 | 34.28 | 4.53 | 25.03 | 294 | 0.25 |
| 149 | 12.57 | 34.36E | 1.40 | 201 | 100 | 13.99 | 33.80 | 4.00 | 25.28 | 270 | 0.32 |
| 195 | 10.88 | 34.43E | 1.33 | 166 | 150 | 12.51 | 34.36 | 1.40 | 26.01 | 200 | 0.44 |
| | | | | | 200 | (10.79) | (34.43) | (1.33) | (26.39) | (165) | (0.53) |
| CREST; January 18, 1952; 1450 GCT;[a] 26°10.5'N, 114°07'W; sounding, 1000 fm; wind, 250°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°. | | | | | | | | | | | 130.40 |
| 1112 | 3.67 | 34.54E | 0.72 | 62 | | | | | | | |
| 1115 | 3.66 | - | 0.71 | | | | | | | | |
| 1118 | 3.66 | 34.54E | 0.74 | 61 | | | | | | | |
| 1121 | - | 34.51E | 0.80 | | | | | | | | |
| 1124 | 3.66 | 34.54E | 0.62 | 61 | | | | | | | |
| 1127 | 3.66 | 34.54E | 0.70 | 61 | | | | | | | |
| 1130 | 3.66 | 34.54E | 0.71 | 61 | | | | | | | |
| 1133 | 3.65 | 34.60E | 0.68 | 57 | | | | | | | |
| 1136 | 3.64 | - | 0.70 | | | | | | | | |
| 1139 | 3.62 | 34.54E | 0.71 | 61 | | | | | | | |
| 1142 | 3.61 | 34.56E | 0.67 | 60 | | | | | | | |
| 1145 | 3.61 | 34.54E | 0.71 | 61 | | | | | | | |
| 1148 | 3.62 | 34.54E | 0.77 | 61 | | | | | | | |
| 1151 | 3.62 | 34.56E | 0.71 | 60 | | | | | | | |
| CREST; January 18, 1952; 0656 GCT; 25°49'N, 114°46'W; sounding, 2100 fm; wind, 310°, force 1; weather, partly cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | | 130.50 |
| 0 | 19.64 | 34.56E | 5.19 | 340 | 0 | 19.64 | 34.56 | 5.19 | 24.54 | 340 | 0.00 |
| 10 | 19.60 | 34.45 | 5.23 | 347 | 10 | 19.60 | 34.45 | 5.23 | 24.47 | 347 | 0.03 |
| 25 | 19.07 | 34.36E | 5.24 | 341 | 20 | 19.29 | 34.37 | 5.24 | 24.49 | 346 | 0.07 |
| 50 | 18.79 | 34.33E | 5.25 | 336 | 30 | 19.00 | 34.35 | 5.25 | 24.54 | 340 | 0.10 |
| 75 | 15.58 | 33.73E | 5.30 | 308 | 50 | 18.79 | 34.33 | 5.25 | 24.58 | 336 | 0.17 |
| 101 | 12.78 | 33.75E | 3.95 | 250 | 75 | 15.58 | 33.73 | 5.30 | 24.89 | 308 | 0.25 |
| 154 | 10.92 | 34.07E | 2.35 | 193 | 100 | 12.92 | 33.75 | 4.02 | 25.46 | 253 | 0.32 |
| 201 | 10.55 | 34.45E | 1.16 | 159 | 150 | 10.99 | 34.04 | 2.49 | 26.05 | 197 | 0.44 |
| | | | | | 200 | 10.56 | 34.45 | 1.19 | 26.45 | 159 | 0.53 |
| CREST; January 18, 1952; 0136 GCT; 25°29'N, 115°24'W; sounding, 2150 fm; wind, 120°, force 4; weather, overcast; sea, very rough; wire angle, 13°. | | | | | | | | | | | 130.60 |
| 0 | 18.38 | 34.23E | 5.29 | 334 | 0 | 18.38 | 34.23 | 5.29 | 24.61 | 334 | 0.00 |
| 10 | 18.37 | 34.13 | 5.25 | 341 | 10 | 18.37 | 34.13 | 5.25 | 24.53 | 341 | 0.03 |
| 25 | 18.38 | 34.16E | 5.31 | 339 | 20 | 18.38 | 34.15 | 5.29 | 24.55 | 340 | 0.07 |
| 53 | 18.42 | 34.20E | 5.24 | 337 | 30 | 18.39 | 34.18 | 5.31 | 24.57 | 338 | 0.10 |
| 78 | 18.38 | 34.16E | 5.29 | 339 | 50 | 18.42 | 34.20 | 5.24 | 24.58 | 337 | 0.17 |
| 106 | 14.60 | 33.87E | 4.02 | 277 | 75 | 18.38 | 34.16 | 5.29 | 24.56 | 339 | 0.25 |
| 158 | 11.21 | 34.07E | 2.51 | 198 | 100 | 15.42 | 33.91 | 4.25 | 25.06 | 291 | 0.33 |
| 208 | 10.78 | 34.45E | 1.19 | 163 | 150 | 11.28 | 33.96 | 2.75 | 25.94 | 208 | 0.46 |
| | | | | | 200 | 10.85 | 34.43 | 1.37 | 26.38 | 166 | 0.56 |
| CREST; January 17, 1952; 1831 GCT; 24°54'N, 116°11'W; sounding, 2150 fm; wind, 060°, force 4; weather, cloudy; sea, very rough; wire angle, 23°. | | | | | | | | | | | 130.70 |
| 0 | 18.42 | 34.13E | 5.31 | 342 | 0 | 18.42 | 34.13 | 5.31 | 24.52 | 342 | 0.00 |
| 9 | 18.46 | 34.09 | 5.31 | 346 | 10 | 18.45 | 34.09 | 5.31 | 24.48 | 346 | 0.03 |
| 23 | 18.45 | 34.20E | 5.29 | 338 | 20 | 18.45 | 34.20 | 5.30 | 24.57 | 338 | 0.07 |
| 46 | 18.49 | 34.13E | 5.30 | 344 | 30 | 18.45 | 34.18 | 5.29 | 24.55 | 339 | 0.10 |
| 69 | 18.42 | 34.13E | 5.22 | 342 | 50 | 18.48 | 34.13 | 5.29 | 24.51 | 344 | 0.17 |
| 93 | 14.35 | 33.64E | 5.29 | 289 | 75 | 17.85 | 34.13 | 5.23 | 24.66 | 329 | 0.26 |
| 140 | 12.78 | 34.16E | 2.12 | 220 | 100 | 13.95 | 33.65 | 5.22 | 25.17 | 280 | 0.33 |
| 183 | 11.95 | 34.51E | 1.09 | 179 | 150 | 12.58 | 34.27 | 1.80 | 25.93 | 208 | 0.46 |

a) Test cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 130.80 | CREST; January 17, 1952; 1322 GCT; 24°35'N, 116°46'W; sounding, 2200 fm; wind, 020°, force 3; weather, cloudy; sea, rough; wire angle, 13°. | | | | | | | | | | |
| 0 | 19.94 | 34.49E | 5.09 | 353 | 0 | 19.94 | 34.49 | 5.09 | 24.41 | 353 | 0.00 |
| 10 | 19.95 | 34.42 | 5.09 | 358 | 10 | 19.95 | 34.42 | 5.09 | 24.35 | 358 | 0.04 |
| 25 | 19.94 | 34.49E | 5.07 | 353 | 20 | 19.95 | 34.48 | 5.08 | 24.40 | 354 | 0.07 |
| 50 | 19.80 | 34.43E | 5.08 | 354 | 30 | 19.94 | 34.49 | 5.08 | 24.41 | 353 | 0.11 |
| 73 | 15.17 | 33.87E | 4.26 | 289 | 50 | 19.80 | 34.43 | 5.08 | 24.40 | 354 | 0.18 |
| 97 | 13.46 | 34.00E | 3.02 | 245 | 75 | 15.00 | 33.87 | 4.08 | 25.12 | 285 | 0.26 |
| 150 | 12.84 | 34.60E | 0.63 | 189 | 100 | 13.38 | 34.04 | 2.87 | 25.59 | 240 | 0.32 |
| 197 | 12.06 | 34.70E | 0.33 | 167 | 150 | 12.84 | 34.60 | 0.63 | 26.13 | 189 | 0.43 |
| | | | | | 200 | (11.98) | (34.70) | (0.33) | (26.38) | (166) | (0.52) |
| 133.25 | CREST; January 19, 1952; 0017 GCT; 25°59'N, 112°55'W; sounding, 58 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 20.70 | 34.58E | 5.12 | 366 | 0 | 20.70 | 34.58 | 5.12 | 24.28 | 366 | 0.00 |
| 10 | 20.69 | 34.58 | 5.11 | 365 | 10 | 20.69 | 34.58 | 5.11 | 24.28 | 365 | 0.04 |
| 20 | 20.54 | - | 5.11 | | 20 | 20.54 | 34.60 | 5.11 | 24.33 | 360 | 0.07 |
| 30 | 20.30 | 34.61E | 5.02 | 353 | 30 | 20.30 | 34.61 | 5.02 | 24.40 | 353 | 0.11 |
| 50 | 19.16 | 34.47E | 4.70 | 335 | 50 | 19.16 | 34.47 | 4.70 | 24.60 | 335 | 0.18 |
| 75 | 15.94 | 34.14E | 2.83 | 285 | 75 | 15.94 | 34.14 | 2.83 | 25.12 | 285 | 0.26 |
| 133.30 | CREST; January 19, 1952; 0246 GCT; 25°55'N, 113°03'W; sounding, 75 fm; wind, 300°, force 4; weather, clear; sea, rough; wire angle, 04°. | | | | | | | | | | |
| 0 | 19.41 | 34.49E | | 340 | 0 | 19.41 | 34.49 | | 24.55 | 340 | 0.00 |
| 10 | 19.29 | 34.43 | | 341 | 10 | 19.29 | 34.43 | | 24.53 | 341 | 0.03 |
| 20 | 19.28 | 34.52E | | 335 | 20 | 19.28 | 34.52 | | 24.60 | 335 | 0.07 |
| 30 | 19.26 | 34.40E | | 343 | 30 | 19.26 | 34.40 | | 24.52 | 343 | 0.10 |
| 50 | 18.41 | 34.31E | | 329 | 50 | 18.41 | 34.31 | | 24.66 | 329 | 0.17 |
| 75 | 14.94 | 34.09E | | 268 | 75 | 14.94 | 34.09 | | 25.30 | 268 | 0.24 |
| 100 | 13.17 | 34.14E | | 229 | 100 | 13.17 | 34.14 | | 25.71 | 229 | 0.31 |
| 133.40 | CREST; January 19, 1952; 0801 GCT; 25°35'N, 113°45'W; sounding, 1500 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 35°. | | | | | | | | | | |
| 0 | 20.10 | 34.51E | 5.14 | 356 | 0 | 20.10 | 34.51 | 5.14 | 24.38 | 356 | 0.00 |
| 7 | 20.09 | 34.49 | 5.15 | 357 | 10 | 20.08 | 34.49 | 5.14 | 24.37 | 356 | 0.04 |
| 20 | 20.12 | 34.49E | 5.12 | 357 | 20 | 20.12 | 34.49 | 5.12 | 24.36 | 357 | 0.07 |
| 45 | 19.54 | 34.42E | 4.98 | 348 | 30 | 19.99 | 34.48 | 5.05 | 24.39 | 355 | 0.11 |
| 65 | 19.38 | 34.51E | 5.05 | 338 | 50 | 19.49 | 34.42 | 4.98 | 24.47 | 347 | 0.18 |
| 88 | 16.06 | 34.09E | 3.65 | 292 | 75 | 19.30 | 34.51 | 4.88 | 24.59 | 336 | 0.26 |
| 130 | 13.12 | 34.31E | 1.51 | 215 | 100 | 14.90 | 34.13 | 2.35 | 25.34 | 264 | 0.34 |
| 171 | 11.72 | 34.42E | 1.54 | 182 | 150 | 12.30 | 34.39 | 1.52 | 26.08 | 194 | 0.46 |
| 133.50 | CREST; January 19, 1952; 1341 GCT; 25°14.5'N, 114°24'W; sounding, 2120 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 25°. | | | | | | | | | | |
| 0 | 20.55 | 34.56E | 5.09 | 363 | 0 | 20.55 | 34.56 | 5.09 | 24.30 | 363 | 0.00 |
| 9 | 20.54 | 34.54 | 5.07 | 364 | 10 | 20.53 | 34.54 | 5.08 | 24.29 | 364 | 0.04 |
| 23 | 20.53 | 34.61E | 5.09 | 359 | 20 | 20.53 | 34.60 | 5.09 | 24.34 | 360 | 0.07 |
| 49 | 20.57 | 34.60E | 5.07 | 361 | 30 | 20.55 | 34.62 | 5.09 | 24.35 | 359 | 0.11 |
| 72 | 16.66 | 34.09E | 3.82 | 305 | 50 | 20.57 | 34.58 | 5.07 | 24.31 | 362 | 0.18 |
| 99 | 14.19 | 34.09E | 2.68 | 253 | 75 | 16.25 | 34.08 | 3.70 | 25.00 | 296 | 0.26 |
| 147 | 11.21 | 34.27E | 1.85 | 184 | 100 | 14.12 | 34.12 | 2.61 | 25.50 | 249 | 0.33 |
| 195 | 10.66 | 34.43E | 0.99 | 162 | 150 | 11.70 | 34.47 | 1.03 | 26.25 | 177 | 0.44 |
| | | | | | 200 | (10.60) | (34.43) | (0.98) | (26.42) | (161) | (0.53) |
| 133.60 | CREST; January 19, 1952; 1904 GCT; 24°51'N, 115°00'W; sounding, 2150 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 35°. | | | | | | | | | | |
| 0 | 19.68 | 34.46E | | 349 | 0 | 19.68 | 34.46 | | 24.45 | 349 | 0.00 |
| 8 | 19.66 | 34.38 | | 354 | 10 | 19.66 | 34.39 | | 24.41 | 353 | 0.04 |
| 20 | 19.68 | 34.45E | | 349 | 20 | 19.68 | 34.45 | | 24.45 | 349 | 0.07 |
| 45 | 19.68 | 34.46E | | 349 | 30 | 19.68 | 34.46 | | 24.45 | 349 | 0.11 |
| 64 | 19.58 | 34.43E | | 348 | 50 | 19.65 | 34.46 | | 24.46 | 348 | 0.18 |
| 87 | 15.93 | 33.89E | | 303 | 75 | 17.65 | 34.18 | | 24.75 | 321 | 0.26 |
| 124 | 12.88 | 34.22E | | 218 | 100 | 14.25 | 33.91 | | 25.31 | 267 | 0.33 |
| 162 | 12.21 | 34.58E | | 179 | 150 | 12.40 | 34.46 | | 26.11 | 191 | 0.45 |
| 236 | 11.53 | 34.73E | | 155 | 200 | 11.82 | 34.71 | | 26.42 | 162 | 0.54 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; January 20, 1952; 1948 GCT; 25°36'N, 112°19'W; sounding, 40 fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 09°. | | | | | | | | | | | 137.23 |
| 0 | 20.44 | 34.60E | 5.03 | 358 | 0 | 20.44 | 34.60 | 5.03 | 24.36 | 358 | 0.00 |
| 10 | 20.44 | 34.52 | 5.02 | 363 | 10 | 20.44 | 34.52 | 5.02 | 24.30 | 363 | 0.04 |
| 20 | 20.44 | 34.60E | 4.98 | 358 | 20 | 20.44 | 34.60 | 4.98 | 24.36 | 358 | 0.07 |
| 30 | 20.38 | 34.60E | 4.94 | 356 | 30 | 20.38 | 34.60 | 4.94 | 24.38 | 356 | 0.11 |
| 49 | 20.20 | 34.60E | 4.81 | 352 | 50 | (20.19) | (34.60) | (4.81) | (24.43) | (351) | (0.18) |
| CREST; January 20, 1952; 1649 GCT; 25°23'N, 112°45'W; sounding, 100 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 15°. | | | | | | | | | | | 137.30 |
| 0 | 20.97 | 34.60E | 4.91 | 371 | 0 | 20.97 | 34.60 | 4.91 | 24.22 | 371 | 0.00 |
| 10 | 21.00 | 34.58 | 4.94 | 373 | 10 | 21.00 | 34.58 | 4.94 | 24.19 | 373 | 0.04 |
| 24 | 21.01 | 34.60E | 4.96 | 372 | 20 | 21.01 | 34.59 | 4.95 | 24.20 | 373 | 0.07 |
| 48 | 20.90 | 34.60E | 4.95 | 369 | 30 | 21.00 | 34.60 | 4.96 | 24.21 | 372 | 0.11 |
| 72 | 14.46 | 33.89E | 3.72 | 273 | 50 | 20.89 | 34.60 | 4.94 | 24.24 | 369 | 0.19 |
| 96 | - | 34.29E | 1.80 | | 75 | 14.29 | 33.90 | 3.49 | 25.30 | 268 | 0.27 |
| 119 | 12.99 | 34.52E | 0.77 | 198 | 100 | 13.48 | 34.34 | 1.60 | 25.80 | 220 | 0.33 |
| CREST; January 20, 1952; 1125 GCT; 25°00'N, 113°23.5'W; sounding, 1200 fm; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 22°. | | | | | | | | | | | 137.40 |
| 0 | 20.52 | 34.70E | 5.04 | 352 | 0 | 20.52 | 34.70 | 5.04 | 24.41 | 352 | 0.00 |
| 9 | 20.52 | 34.56 | 5.07 | 363 | 10 | 20.52 | 34.56 | 5.07 | 24.31 | 363 | 0.04 |
| 23 | 20.52 | 34.63E | 5.05 | 357 | 20 | 20.52 | 34.63 | 5.06 | 24.36 | 357 | 0.07 |
| 46 | 19.80 | 34.54E | 4.98 | 346 | 30 | 20.49 | 34.62 | 5.05 | 24.36 | 357 | 0.11 |
| 69 | 15.28 | 34.11E | 3.49 | 273 | 50 | 19.61 | 34.50 | 4.92 | 24.50 | 344 | 0.18 |
| 91 | 14.39 | 34.22E | 2.17 | 247 | 75 | 15.03 | 34.11 | 3.07 | 25.30 | 268 | 0.26 |
| 137 | 12.32 | 34.60E | 0.81 | 179 | 100 | 13.90 | 34.45 | 1.79 | 25.80 | 220 | 0.32 |
| 176 | 11.91 | 34.58E | 0.35 | 173 | 150 | 12.13 | 34.60 | 0.60 | 26.27 | 176 | 0.42 |
| CREST; January 20, 1952; 0523, 0547 GCT; 24°41'N, 114°01.5'W; sounding, 2100 fm; wind, 320°, force 4; weather, missing; sea, rough; wire angle, 03°, 03°. | | | | | | | | | | | 137.50 |
| 0 | 20.12 | 34.52E | 5.15 | 355 | 0 | 20.12 | 34.52 | 5.15 | 24.38 | 355 | 0.00 |
| 9 | 20.14 | 34.47 | 5.14 | 359 | 10 | 20.14 | 34.47 | 5.13 | 24.34 | 359 | 0.04 |
| 25 | 20.15 | 34.51E | 5.13 | 357 | 20 | 20.15 | 34.51 | 5.13 | 24.37 | 357 | 0.07 |
| 55 | 15.22 | 33.66E | 5.04 | 305 | 30 | 20.15 | 34.51 | 5.12 | 24.37 | 357 | 0.11 |
| 79 | 13.22 | 33.72E | 4.34 | 261 | 50 | 17.00 | 33.67 | 5.09 | 24.51 | 343 | 0.18 |
| 108 | 11.96 | 33.84E | 3.64 | 229 | 75 | 13.47 | 33.71 | 4.46 | 25.32 | 266 | 0.25 |
| 160 | 10.87 | 34.32E | 1.49 | 174 | 100 | 12.27 | 33.80 | 3.83 | 25.63 | 237 | 0.32 |
| 211 | 10.92 | 34.67E | 0.61 | 149 | 150 | 10.90 | 34.19 | 2.06 | 26.18 | 184 | 0.42 |
| | | | | | 200 | 10.92 | 34.67 | 0.70 | 26.55 | 149 | 0.51 |
| 313 | 9.47 | 34.56E | 0.34 | 133 | 250 | 10.53 | 34.64 | 0.45 | 26.60 | 145 | 0.59 |
| 425 | - | 34.51E | 0.35 | | 300 | 9.69 | 34.57 | 0.35 | 26.69 | 136 | 0.66 |
| 529 | 6.82 | 34.55E | 0.19 | 96 | 400 | 8.25 | 34.51 | 0.35 | 26.87 | 119 | 0.79 |
| 633 | 6.02 | 34.52E | 0.19 | 88 | 500 | 7.10 | 34.54 | 0.22 | 27.06 | 101 | 0.91 |
| 836 | 4.84 | 34.52E | 0.31 | 75 | 600 | 6.27 | 34.53 | 0.20 | 27.17 | 91 | 1.01 |
| 1043 | 4.08 | 34.60E | 0.51 | 61 | 700 | 5.58 | 34.52 | 0.21 | 27.25 | 83 | 1.11 |
| 1248 | 3.53 | 34.67E | 0.72 | 50 | 800 | 5.00 | 34.52 | 0.29 | 27.32 | 77 | 1.20 |
| | | | | | 1000 | 4.22 | 34.58 | 0.47 | 27.45 | 64 | 1.36 |
| | | | | | 1200 | 3.64 | 34.66 | 0.68 | 27.57 | 52 | 1.49 |
| CREST; January 19, 1952; 2330 GCT; 24°20'N, 114°40'W; sounding, 2150 fm; wind, 340°, force 3; weather, cloudy; sea, very rough; wire angle, 16°. | | | | | | | | | | | 137.60 |
| 0 | 19.88 | 34.29E | 5.17 | 366 | 0 | 19.88 | 34.29 | 5.17 | 24.27 | 366 | 0.00 |
| 10 | 19.88 | 34.22 | 5.19 | 371 | 10 | 19.88 | 34.22 | 5.19 | 24.22 | 371 | 0.04 |
| 24 | 19.88 | 34.31E | 5.17 | 365 | 20 | 19.88 | 34.30 | 5.19 | 24.28 | 365 | 0.07 |
| 53 | 19.78 | 34.29E | 5.20 | 364 | 30 | 19.87 | 34.31 | 5.19 | 24.29 | 364 | 0.11 |
| 77 | 19.38 | 34.51E | 5.19 | 338 | 50 | 19.80 | 34.29 | 5.20 | 24.29 | 364 | 0.18 |
| 105 | 13.06 | 33.76E | 4.14 | 255 | 75 | 19.43 | 34.51 | 5.20 | 24.56 | 339 | 0.27 |
| 156 | 10.96 | 34.07E | 2.47 | 194 | 100 | 13.49 | 33.76 | 4.42 | 25.35 | 263 | 0.35 |
| 206 | 10.19 | 34.29E | 1.62 | 165 | 150 | 11.10 | 33.97 | 2.60 | 25.98 | 204 | 0.47 |
| | | | | | 200 | 10.25 | 34.29 | 1.70 | 26.37 | 166 | 0.56 |

SIO

CCOFI
5202

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| **80.51** | HORIZON; February 20, 1952; 1243 GCT; 34°27'N, 120°33.5'W; sounding, 50 fm; wind, 330°, force 4; weather, missing; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | 12.33 | 33.30 | 5.94 | 275 | 0 | 12.33 | 33.30 | 5.94 | 25.23 | 275 | 0.00 |
| 10 | 12.21 | 33.30 | 5.86 | 273 | 10 | 12.21 | 33.30 | 5.86 | 25.25 | 273 | 0.03 |
| 20 | 11.77 | 33.33 | 5.75 | 263 | 20 | 11.77 | 33.33 | 5.75 | 25.36 | 263 | 0.05 |
| 30 | 11.74 | 33.35 | 5.69 | 261 | 30 | 11.74 | 33.35 | 5.69 | 25.38 | 261 | 0.08 |
| 50 | 11.04 | 33.49 | 4.26 | 238 | 50 | 11.04 | 33.49 | 4.26 | 25.61 | 238 | 0.13 |
| 75 | 10.52 | 33.60 | 3.66 | 221 | 75 | 10.52 | 33.60 | 3.66 | 25.79 | 221 | 0.19 |
| **80.55** | HORIZON; February 20, 1952; 1509 GCT; 34°19.5'N, 120°48.5'W; sounding, 400 fm; wind, 260°, force 2; weather, overcast; sea, moderate; wire angle, 07°. | | | | | | | | | | |
| 0 | - | 33.21 | 6.31 | | 0 | 12.7 | 33.21 | 6.31 | 25.09 | 288 | 0.00 |
| 10 | 12.57 | 33.24 | 6.29 | 284 | 10 | 12.57 | 33.24 | 6.29 | 25.14 | 284 | 0.03 |
| 25 | - | 33.22 | 6.25 | | 20 | 12.6 | 33.23 | 6.27 | 25.12 | 285 | 0.06 |
| 50 | - | 33.30 | 6.13 | | 30 | 12.5 | 33.22 | 6.24 | 25.13 | 284 | 0.09 |
| 74 | - | 33.51 | 4.14 | | 50 | 12.5 | 33.30 | 6.13 | 25.20 | 278 | 0.14 |
| 98 | 10.08 | 33.60 | 3.75 | 214 | 75 | 11.3 | 33.31 | 4.13 | 25.43 | 256 | 0.21 |
| 148 | 9.02 | 33.96 | 2.64 | 171 | 100 | 10.10 | 33.62 | 3.62 | 25.88 | 213 | 0.27 |
| 193 | 8.67 | 34.05 | 2.33 | 159 | 150 | 9.02 | 33.97 | 2.60 | 26.33 | 170 | 0.37 |
| 240 | 8.32 | 34.11 | 2.04 | 150 | 200 | 8.63 | 34.06 | 2.30 | 26.46 | 158 | 0.45 |
| 286 | 7.52 | 34.13 | 1.63 | 137 | 250 | 8.18 | 34.12 | 1.95 | 26.58 | 147 | 0.53 |
| 337 | 7.12 | 34.16 | 1.25 | 129 | 300 | 7.37 | 34.14 | 1.50 | 26.71 | 134 | 0.60 |
| 384 | 6.56 | 34.16 | 1.04 | 122 | 400 | 6.38 | 34.16 | 0.98 | 26.86 | 120 | 0.73 |
| 431 | 6.11 | 34.18 | 0.83 | 115 | 500 | 5.82 | 34.21 | 0.62 | 26.97 | 109 | 0.85 |
| 479 | 5.92 | 34.20 | 0.68 | 111 | 600 | (5.48) | (34.28) | | (27.07) | (100) | (0.96) |
| 583 | 5.52 | 34.27 | 0.48 | 101 | | | | | | | |
| **80.60** | HORIZON; February 20, 1952; 1842 GCT; 34°09.5'N, 121°10'W; sounding, 1200 fm; wind, 280°, force 4; weather, overcast; sea, rough; wire angle, 11°. | | | | | | | | | | |
| 0 | - | 33.24 | 6.36 | | 0 | 12.9 | 33.24 | 6.36 | 25.07 | 290 | 0.00 |
| 10 | 12.85 | 33.21 | 6.39 | 291 | 10 | 12.85 | 33.21 | 6.39 | 25.06 | 291 | 0.03 |
| 24 | - | 33.24 | 6.38 | | 20 | 12.8 | 33.24 | 6.37 | 25.09 | 288 | 0.06 |
| 48 | - | 33.24 | 6.42 | | 30 | 12.8 | 33.24 | 6.37 | 25.09 | 288 | 0.09 |
| 73 | - | 33.22 | 5.96 | | 50 | 12.8 | 33.24 | 6.93 | 25.09 | 288 | 0.14 |
| 97 | 9.28 | 33.13 | 5.22 | 237 | 75 | 11.5 | 33.22 | 5.90 | 25.32 | 266 | 0.21 |
| 148 | 8.68 | 33.80 | 3.23 | 178 | 100 | 9.20 | 33.13 | 5.12 | 25.64 | 235 | 0.28 |
| 192 | 8.34 | 33.98 | 2.80 | 159 | 150 | 8.65 | 33.81 | 3.18 | 26.26 | 177 | 0.38 |
| | | | | | 200 | (8.23) | (34.00) | (2.75) | (26.48) | (156) | (0.47) |
| **80.70** | HORIZON; February 21, 1952; 0011 GCT; 33°50'N, 121°50.5'W; sounding, 1950 fm; wind, 270°, force 4; weather, partly cloudy; sea, moderate; wire angle, 35°. | | | | | | | | | | |
| 0 | - | 32.95 | 6.29 | | 0 | 12.5 | 32.95 | 6.29 | 24.92 | 304 | 0.00 |
| 8 | 12.47 | 32.94 | 6.29 | 304 | 10 | 12.5 | 32.94 | 6.28 | 24.92 | 305 | 0.03 |
| 21 | - | 32.99 | 6.27 | | 20 | 12.5 | 32.99 | 6.27 | 24.96 | 301 | 0.06 |
| 41 | - | 32.95 | 6.30 | | 30 | 12.3 | 32.97 | 6.28 | 24.98 | 299 | 0.09 |
| 61 | - | 32.95 | 6.25 | | 50 | 12.2 | 32.95 | 6.30 | 24.98 | 298 | 0.15 |
| 80 | 10.92 | 32.92 | 5.81 | 278 | 75 | 11.3 | 32.93 | 5.92 | 25.13 | 284 | 0.22 |
| 118 | 9.13 | 33.31 | 4.67 | 221 | 100 | 9.70 | 33.05 | 5.28 | 25.50 | 249 | 0.29 |
| 153 | 8.67 | 33.77 | 3.40 | 180 | 150 | 8.68 | 33.75 | 3.50 | 26.21 | 182 | 0.40 |
| 223 | 8.28 | 34.07 | 1.57 | 152 | 200 | 8.38 | 33.98 | 2.25 | 26.44 | 160 | 0.49 |
| 296 | 7.74 | 34.20 | 1.14 | 135 | 250 | 8.12 | 34.15 | 1.30 | 26.61 | 144 | 0.56 |
| 366 | 7.28 | 34.18 | 1.02 | 130 | 300 | 7.70 | 34.20 | 1.12 | 26.71 | 134 | 0.64 |
| 439 | 6.30 | 34.14 | 0.85 | 120 | 400 | 6.83 | 34.15 | 0.98 | 26.79 | 126 | 0.77 |
| 589 | 5.18 | 34.27 | 0.40 | 97 | 500 | 5.72 | 34.17 | 0.60 | 26.95 | 111 | 0.90 |
| 754 | 4.54 | 34.36 | 0.34 | 84 | 600 | 5.11 | 34.28 | 0.39 | 27.11 | 96 | 1.01 |
| 943 | 4.02 | 34.45 | 0.53 | 72 | 700 | 4.72 | 34.34 | 0.35 | 27.21 | 87 | 1.11 |
| | | | | | 800 | 4.43 | 34.38 | 0.39 | 27.27 | 81 | 1.20 |
| | | | | | 1000 | (3.88) | (34.47) | | (27.40) | (69) | (1.36) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

HORIZON; February 21, 1952; 0142 GCT;[a] 33°50'N, 121°50.5'W; sounding, 1950 fm; wind, 270°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°. 80.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.5 | 32.99 | | 301 | | | | | | | |
| 10 | 12.47 | 32.94 | | 304 | | | | | | | |
| 20 | 12.4 | 32.95 | | 302 | | | | | | | |
| 29 | 12.3 | 32.95 | | 300 | | | | | | | |
| 48 | 12.2 | 33.01 | | 294 | | | | | | | |
| 66 | 11.07 | 32.99 | | 276 | | | | | | | |
| 84 | 10.05 | 33.10 | | 251 | | | | | | | |
| 100 | 9.42 | 33.30 | | 226 | | | | | | | |
| 111 | 9.13 | 33.35 | | 218 | | | | | | | |
| 120 | 8.88 | 33.49 | | 204 | | | | | | | |
| 125 | 8.87 | 33.51 | | 202 | | | | | | | |
| 128 | 8.86 | 33.58 | | 197 | | | | | | | |
| 182 | 8.25 | 34.00 | | 157 | | | | | | | |
| 229 | 8.14 | 34.13 | | 145 | | | | | | | |
| 278 | 7.86 | 34.16 | | 139 | | | | | | | |

HORIZON; February 21, 1952; 0715 GCT; 33°30.5'N, 122°32.5'W; sounding, 2200 fm; wind, 320°, force 3; weather, clear; sea, slight; wire angle, 12°. 80.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.04 | 6.26 | | 0 | 12.8 | 33.04 | 6.26 | 24.94 | 303 | 0.00 |
| 10 | 12.74 | 33.03 | 6.28 | 302 | 10 | 12.74 | 33.03 | 6.28 | 24.94 | 302 | 0.03 |
| 25 | - | 32.97 | 6.27 | | 20 | 12.7 | 32.98 | 6.28 | 24.91 | 305 | 0.06 |
| 49 | - | 33.03 | 6.28 | | 30 | 12.7 | 32.97 | 6.28 | 24.90 | 306 | 0.09 |
| 73 | - | 33.03 | 6.11 | | 50 | 12.7 | 33.03 | 6.25 | 24.95 | 302 | 0.15 |
| 97 | 10.55 | 32.99 | 5.60 | 267 | 75 | 12.1 | 33.03 | 6.07 | 25.06 | 291 | 0.23 |
| 150 | 9.47 | 33.62 | 3.62 | 203 | 100 | 10.50 | 32.99 | 5.42 | 25.32 | 266 | 0.30 |
| 195 | 8.74 | 33.86 | 3.02 | 174 | 150 | 9.47 | 33.62 | 3.62 | 25.98 | 203 | 0.42 |
| | | | | | 200 | (8.63) | (33.88) | (2.99) | (26.32) | (171) | (0.51) |

HORIZON; February 21, 1952; 1246 GCT; 33°09'N, 123°13'W; sounding, 2300 fm; wind, 360°, force 3; weather, intermittent light drizzle; sea, slight; wire angle, 12°. 80.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.17 | 6.27 | | 0 | 13.1 | 33.17 | 6.27 | 24.98 | 299 | 0.00 |
| 10 | 13.09 | 33.17 | 6.25 | 299 | 10 | 13.09 | 33.17 | 6.25 | 24.98 | 299 | 0.03 |
| 25 | - | 33.17 | 6.25 | | 20 | 13.1 | 33.17 | 6.25 | 24.98 | 299 | 0.06 |
| 49 | - | 33.15 | 6.29 | | 30 | 13.1 | 33.17 | 6.26 | 24.98 | 299 | 0.09 |
| 73 | - | 33.24 | 6.21 | | 50 | 13.0 | 33.15 | 6.28 | 24.98 | 298 | 0.15 |
| 97 | 11.14 | 33.12 | 5.55 | 267 | 75 | 13.0 | 33.24 | 6.20 | 25.05 | 292 | 0.22 |
| 147 | 8.93 | 33.57 | 3.97 | 199 | 100 | 11.10 | 33.12 | 5.25 | 25.32 | 267 | 0.29 |
| 191 | 8.29 | 33.91 | 3.47 | 164 | 150 | 8.89 | 33.64 | 3.90 | 26.09 | 193 | 0.41 |
| 282 | 7.14 | 33.96 | 2.66 | 144 | 200 | 8.18 | 33.92 | 3.40 | 26.42 | 162 | 0.50 |
| 378 | 6.10 | 34.09 | 1.27 | 122 | 250 | 7.53 | 33.94 | 3.03 | 26.53 | 151 | 0.58 |
| 469 | 5.84 | 34.20 | 0.61 | 110 | 300 | 6.94 | 33.98 | 2.30 | 26.65 | 140 | 0.66 |
| 565 | 5.40 | 34.29 | 0.38 | 98 | 400 | 5.98 | 34.12 | 1.03 | 26.88 | 118 | 0.79 |
| 757 | 4.53 | 34.36 | 0.35 | 84 | 500 | 5.74 | 34.23 | 0.50 | 27.00 | 107 | 0.91 |
| 948 | 3.91 | 34.43 | 0.51 | 72 | 600 | 5.21 | 34.31 | 0.35 | 27.13 | 95 | 1.01 |
| 1151 | 3.48 | 34.48 | 0.73 | 64 | 700 | 4.77 | 34.36 | 0.35 | 27.22 | 86 | 1.11 |
| | | | | | 800 | 4.38 | 34.37 | 0.37 | 27.27 | 81 | 1.20 |
| | | | | | 1000 | 3.79 | 34.44 | 0.58 | 27.38 | 70 | 1.37 |

HORIZON; February 21, 1952; 1801 GCT; 32°53'N, 123°54'W; sounding, 2300 fm; wind, 030°, force 2; weather, partly cloudy; sea, moderate; wire angle, 16°. 80.100

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.01 | 6.21 | | 0 | 13.1 | 33.01 | 6.21 | 24.85 | 311 | 0.00 |
| 10 | 13.08 | 32.99 | 6.22 | 312 | 10 | 13.08 | 32.99 | 6.22 | 24.84 | 312 | 0.03 |
| 24 | - | 32.97 | 6.21 | | 20 | 13.1 | 32.97 | 6.22 | 24.82 | 314 | 0.06 |
| 48 | - | 32.97 | 6.22 | | 30 | 13.0 | 32.97 | 6.20 | 24.84 | 312 | 0.09 |
| 71 | - | 33.10 | 5.89 | | 50 | 13.0 | 32.97 | 6.21 | 24.84 | 312 | 0.16 |
| 94 | 10.28 | 33.01 | 5.70 | 261 | 75 | 11.9 | 33.10 | 5.85 | 25.15 | 282 | 0.23 |
| 145 | 9.42 | 33.64 | 3.42 | 201 | 100 | 10.00 | 33.01 | 5.58 | 25.42 | 257 | 0.30 |
| 189 | 9.00 | 33.91 | 2.55 | 174 | 150 | 9.36 | 33.69 | 3.25 | 26.06 | 196 | 0.41 |

a) Bathythermograph calibration cast.

SIO

CCOFI 5202

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **85.38** | HORIZON; February 20, 1952; 0451 GCT; 34°02'N, 119°02'W; sounding, 75 fm; wind, 290°, force 3; weather, clear; sea, slight; wire angle, 06°. | | | | | | | | | | |
| 0 | 12.11 | 33.37 | 5.41 | 266 | 0 | 12.11 | 33.37 | 5.41 | 25.32 | 266 | 0.00 |
| 10 | 12.08 | 33.37 | 5.40 | 265 | 10 | 12.08 | 33.37 | 5.40 | 25.33 | 265 | 0.03 |
| 20 | 11.95 | 33.37 | 5.28 | 263 | 20 | 11.95 | 33.37 | 5.28 | 25.35 | 263 | 0.05 |
| 30 | 11.15 | 33.37 | 4.62 | 249 | 30 | 11.15 | 33.37 | 4.62 | 25.50 | 249 | 0.08 |
| 50 | 10.54 | 33.30 | 4.09 | 244 | 50 | 10.54 | 33.30 | 4.09 | 25.55 | 244 | 0.13 |
| 75 | 10.30 | 33.58 | 3.80 | 219 | 75 | 10.30 | 33.58 | 3.80 | 25.81 | 219 | 0.19 |
| **85.40** | HORIZON; February 20, 1952; 0226, 0254 GCT; 33°57'N, 119°10'W; sounding, 350 fm; wind, 280°, force 4; weather, partly cloudy; sea, rough; wire angle, 35°, 45°. | | | | | | | | | | |
| 0 | - | 33.30 | 6.13 | | 0 | 13.1 | 33.30 | 6.13 | 25.08 | 289 | 0.00 |
| 8 | 13.10 | 33.26 | 6.13 | 292 | 10 | 13.1 | 33.26 | 6.12 | 25.05 | 292 | 0.03 |
| 21 | - | 33.26 | 6.06 | | 20 | 13.1 | 33.26 | 6.08 | 25.05 | 292 | 0.06 |
| 41 | - | 33.26 | 5.99 | | 30 | 13.0 | 33.26 | 6.00 | 25.07 | 290 | 0.09 |
| 61 | - | 33.35 | 5.10 | | 50 | 12.7 | 33.28 | 5.62 | 25.14 | 283 | 0.15 |
| 81 | 10.24 | 33.49 | 4.26 | 225 | 75 | 10.5 | 33.53 | 4.48 | 25.74 | 226 | 0.21 |
| 120 | 9.46 | 33.82 | 2.93 | 188 | 100 | 10.00 | 33.70 | 3.30 | 25.96 | 206 | 0.26 |
| 155 | 9.04 | 34.04 | 2.05u | 165 | 150 | 9.10 | 34.02 | | 26.36 | 168 | 0.36 |
| 192 | 8.70 | 34.09 | 2.48 | 157 | 200 | 8.61 | 34.10 | 2.27 | 26.50 | 155 | 0.44 |
| | | | | | 250 | 8.10 | 34.16 | 1.55 | 26.62 | 143 | 0.52 |
| 214 | 8.46 | 34.13 | 1.94 | 150 | 300 | 7.80 | 34.20 | 1.30 | 26.70 | 135 | 0.59 |
| 256 | 8.06 | 34.17 | 1.52 | 141 | 400 | 7.19 | 34.24 | 0.78 | 26.82 | 124 | 0.72 |
| 297 | 7.84 | 34.20 | 1.32 | 136 | 500 | (6.46) | (34.32) | | (26.98) | (109) | (0.85) |
| 339 | 7.52 | 34.23 | 1.02 | 129 | | | | | | | |
| 382 | 7.29 | 34.23 | 0.85 | 126 | | | | | | | |
| 474 | 6.64 | 34.31 | 0.50 | 112 | | | | | | | |
| **85.50** | HORIZON; February 19, 1952; 2005 GCT; 33°37'N, 119°52.5'W; sounding, 130 fm; wind, 300°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 13.17 | 33.28 | 6.23 | 292 | 0 | 13.17 | 33.28 | 6.23 | 25.05 | 292 | 0.00 |
| 9 | 13.16 | 33.26 | 6.28 | 293 | 10 | 13.20 | 33.26 | 6.28 | 25.03 | 294 | 0.03 |
| 23 | 13.15 | 33.28 | 6.27 | 292 | 20 | 13.15 | 33.28 | 6.27 | 25.05 | 292 | 0.06 |
| 47 | 11.90 | 33.30 | 5.70 | 267 | 30 | 13.14 | 33.28 | 6.20 | 25.05 | 292 | 0.09 |
| 69 | 10.20 | 33.49 | 4.23 | 224 | 50 | 11.70 | 33.31 | 5.45 | 25.35 | 263 | 0.14 |
| 92 | 9.92 | 33.75 | 3.35 | 201 | 75 | 10.10 | 33.66 | 3.95 | 25.91 | 210 | 0.20 |
| 143 | 8.96 | 33.84 | 3.08 | 179 | 100 | 9.80 | 33.78 | 3.27 | 26.05 | 196 | 0.25 |
| | | | | | 150 | (8.85) | (33.84) | | (26.25) | (177) | (0.35) |
| **85.60** | HORIZON; February 19, 1952; 1435 GCT; 33°19'N, 120°32'W; sounding, 625 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 30°. | | | | | | | | | | |
| 0 | - | 33.24 | 6.19 | | 0 | 12.9 | 33.24 | 6.19 | 25.07 | 290 | 0.00 |
| 9 | 12.92 | 33.24 | 6.18 | 290 | 10 | 12.9 | 33.24 | 6.17 | 25.07 | 290 | 0.03 |
| 23 | - | 33.28 | - | | 20 | 12.8 | 33.28 | 6.16 | 25.12 | 285 | 0.06 |
| 44 | - | 33.28 | 6.10 | | 30 | 12.9 | 33.28 | 6.14 | 25.10 | 287 | 0.09 |
| 65 | - | 33.48 | 4.25 | | 50 | 13.0 | 33.29 | 5.60 | 25.09 | 288 | 0.14 |
| 86 | 9.82 | 33.51 | 3.99 | 217 | 75 | 10.2 | 33.50 | 4.13 | 25.77 | 224 | 0.21 |
| 129 | 8.91 | 33.89 | 3.03 | 175 | 100 | 9.70 | 33.56 | 3.60 | 25.90 | 211 | 0.26 |
| 168 | 8.60 | 33.98 | 2.69 | 163 | 150 | 8.73 | 33.94 | 2.88 | 26.35 | 168 | 0.36 |
| 247 | 7.64 | 34.13 | 1.69 | 138 | 200 | 8.20 | 34.04 | 2.19 | 26.51 | 153 | 0.44 |
| 333 | 7.08 | 34.22 | 1.24 | 124 | 250 | 7.60 | 34.14 | 1.66 | 26.68 | 137 | 0.52 |
| 416 | 6.47 | 34.22 | 0.76 | 116 | 300 | 7.28 | 34.21 | 1.39 | 26.78 | 128 | 0.58 |
| 506 | 6.04 | 34.41u | 0.52 | | 400 | 6.58 | 34.22 | 0.82 | 26.88 | 118 | 0.71 |
| 594 | 5.58 | 34.31 | 0.39 | 99 | 500 | 6.08 | 34.26 | 0.53 | 26.98 | 109 | 0.83 |
| 690 | 5.04 | 34.33 | 0.37 | 91 | 600 | 5.54 | 34.31 | 0.38 | 27.09 | 98 | 0.94 |
| 881 | 4.38 | 34.43 | 0.45 | 77 | 700 | 5.00 | 34.34 | 0.37 | 27.17 | 90 | 1.04 |
| | | | | | 800 | 4.63 | 34.39 | 0.40 | 27.26 | 82 | 1.14 |
| | | | | | 1000 | (4.04) | (34.46) | | (27.37) | (71) | (1.31) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| HORIZON; February 19, 1952; 0919 GCT; 32°58'N, 121°14'W; sounding, 1700 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 35°. | | | | | | | | | | | 85.70 |
| 0 | - | 33.28 | 6.19 | | 0 | 12.9 | 33.28 | 6.19 | 25.10 | 287 | 0.00 |
| 8 | 12.89 | 33.26 | 6.19 | 288 | 10 | 12.9 | 33.26 | 6.18 | 25.09 | 288 | 0.03 |
| 20 | - | 33.30 | 6.17 | | 20 | 12.9 | 33.30 | 6.17 | 25.12 | 286 | 0.06 |
| 45 | - | 33.27 | 5.99 | | 30 | 12.9 | 33.29 | 6.13 | 25.11 | 286 | 0.09 |
| 65 | - | 33.29 | 5.89 | | 50 | 12.9 | 33.27 | 5.94 | 25.09 | 288 | 0.14 |
| 89 | 10.07 | 33.48 | 4.00 | 223 | 75 | 12.0 | 33.35 | 5.79 | 25.33 | 265 | 0.21 |
| 134 | 9.12 | 33.77 | 3.28 | 187 | 100 | 9.90 | 33.56 | 3.80 | 25.87 | 214 | 0.27 |
| 177 | 8.56 | 33.98 | 2.68 | 163 | 150 | 8.90 | 33.86 | 3.00 | 26.26 | 177 | 0.37 |
| 265 | 7.35 | 34.07 | 1.94 | 139 | 200 | 8.19 | 34.02 | 2.44 | 26.50 | 154 | 0.46 |
| 357 | 6.86 | 34.18 | 1.00 | 124 | 250 | 7.50 | 34.06 | 2.09 | 26.63 | 142 | 0.53 |
| 446 | 6.14 | 34.21 | 0.61 | 113 | 300 | 7.13 | 34.10 | 1.56 | 26.71 | 134 | 0.60 |
| 535 | 5.54 | 34.27 | 0.47 | 101 | 400 | 6.50 | 34.20 | 0.76 | 26.88 | 118 | 0.74 |
| 715 | 4.72 | 34.34 | 0.34 | 87 | 500 | 5.75 | 34.24 | 0.50 | 27.01 | 106 | 0.85 |
| 905 | 4.20 | 34.42 | 0.44 | 76 | 600 | 5.20 | 34.29 | 0.42 | 27.11 | 96 | 0.96 |
| 1098 | 3.67 | 34.47 | 0.74 | 67 | 700 | 4.78 | 34.33 | 0.35 | 27.19 | 89 | 1.06 |
| | | | | | 800 | 4.48 | 34.38 | 0.37 | 27.26 | 82 | 1.15 |
| | | | | | 1000 | 3.97 | 34.45 | 0.59 | 27.37 | 71 | 1.32 |
| HORIZON; February 17, 1952; 0310 GCT; 33°28.5'N, 117°46.5'W; sounding, 280 fm; wind, 080°, force 2; weather, cloudy; sea, missing; wire angle, 05°. | | | | | | | | | | | 90.28 |
| 0 | - | 33.22 | 6.15 | | 0 | 14.5 | 33.22 | 6.15 | 24.73 | 323 | 0.00 |
| 10 | 14.18 | 33.24 | 6.18 | 315 | 10 | 14.18 | 33.24 | 6.18 | 24.81 | 315 | 0.03 |
| 25 | 14.12 | 33.23 | 6.19 | 314 | 20 | 14.12 | 33.23 | 6.19 | 24.82 | 314 | 0.06 |
| 49 | 11.72 | 33.31 | 5.07 | 263 | 30 | 13.45 | 33.24 | 6.14 | 24.96 | 300 | 0.09 |
| 72 | 10.40 | 33.46 | 4.16 | 230 | 50 | 11.53 | 33.31 | 5.05 | 25.39 | 260 | 0.15 |
| 94 | 10.41 | 33.60 | 3.83 | 220 | 75 | 10.40 | 33.49 | 4.07 | 25.73 | 228 | 0.21 |
| 144 | 9.63 | 33.84 | 3.01 | 189 | 100 | 10.45 | 33.65 | 3.75 | 25.84 | 217 | 0.27 |
| 190 | 9.04 | 34.14 | 2.16 | 158 | 150 | 9.55 | 33.90 | 2.90 | 26.19 | 184 | 0.37 |
| 236 | 8.54 | 34.20 | 1.76 | 146 | 200 | 8.93 | 34.16 | 2.03 | 26.49 | 155 | 0.46 |
| 283 | 8.06 | 34.18 | 1.53 | 141 | 250 | 8.40 | 34.20 | 1.69 | 26.61 | 144 | 0.53 |
| 335 | 7.52 | 34.25 | 1.09 | 128 | 300 | 7.89 | 34.21 | 1.40 | 26.69 | 136 | 0.60 |
| 385 | 7.12 | 34.20 | 0.86 | 126 | 400 | (7.01) | (34.20) | | (26.81) | (125) | (0.74) |
| HORIZON; February 17, 1952; 0553 GCT; 33°24.5'N, 117°56'W; sounding, 300 fm; wind, 240°, force 2; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | | 90.30 |
| 0 | - | 33.24 | 6.11 | | 0 | 14.6 | 33.24 | 6.11 | 24.72 | 323 | 0.00 |
| 10 | 14.27 | 33.24 | 6.15 | 316 | 10 | 14.27 | 33.24 | 6.15 | 24.79 | 316 | 0.03 |
| 25 | 14.06 | 33.26 | 6.19 | 311 | 20 | 14.11 | 33.25 | 6.19 | 24.83 | 313 | 0.06 |
| 49 | 11.98 | 33.30 | 5.66 | 269 | 30 | 14.00 | 33.27 | 6.15 | 24.87 | 309 | 0.09 |
| 73 | 10.76 | 33.37 | 4.72 | 242 | 50 | 11.90 | 33.31 | 5.61 | 25.32 | 267 | 0.15 |
| 96 | 10.02 | 33.58 | 3.88 | 215 | 75 | 10.70 | 33.39 | 4.65 | 25.60 | 240 | 0.22 |
| 148 | 9.33 | 33.95 | 2.87 | 176 | 100 | 9.95 | 33.62 | 3.71 | 25.90 | 211 | 0.27 |
| 195 | 9.02 | 34.12 | 2.16 | 159 | 150 | 9.32 | 33.99 | 2.81 | 26.30 | 173 | 0.37 |
| 243 | 8.39 | 34.18 | 1.62 | 145 | 200 | 8.98 | 34.13 | 2.08 | 26.46 | 158 | 0.45 |
| | | | | | 250 | (8.25) | (34.18) | (1.59) | (26.61) | (143) | (0.53) |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

90.37 HORIZON; February 17, 1952; 1004 GCT; 33°11'N, 118°23.5'W; sounding, 650 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.26 | 6.05 | | 0 | 14.1 | 33.26 | 6.05 | 24.84 | 312 | 0.00 |
| 10 | - | 33.22 | 6.09 | | 10 | 14.1 | 33.22 | 6.09 | 24.81 | 315 | 0.03 |
| 25 | 14.11 | 33.35 | 6.10 | 305 | 20 | 14.1 | 33.34 | 6.10 | 24.90 | 306 | 0.06 |
| 49 | - | 33.28 | 5.50 | | 30 | 14.0 | 33.35 | 6.07 | 24.93 | 303 | 0.09 |
| 73 | - | 33.44 | 4.49 | | 50 | 12.7 | 33.28 | 5.42 | 25.14 | 283 | 0.15 |
| 97 | - | 33.58 | 3.94 | | 75 | 10.5 | 33.45 | 4.45 | 25.68 | 232 | 0.22 |
| 146 | 9.38 | 33.93 | 2.68 | 179 | 100 | 10.2 | 33.61 | 3.82 | 25.85 | 215 | 0.27 |
| 190 | 8.67 | 34.07 | 2.53 | 158 | 150 | 9.25 | 33.95 | 2.62 | 26.28 | 175 | 0.37 |
| 235 | 8.32 | 34.16 | 1.72 | 146 | 200 | 8.60 | 34.10 | 2.43 | 26.50 | 154 | 0.46 |
| 279 | 7.84 | 34.13 | 1.40 | 141 | 250 | 8.17 | 34.16 | 1.60 | 26.61 | 144 | 0.53 |
| 374 | 7.00 | 34.22 | 0.93 | 123 | 300 | 7.60 | 34.14 | 1.30 | 26.68 | 137 | 0.60 |
| 463 | 6.50 | 34.27 | 0.53 | 113 | 400 | 6.85 | 34.24 | 0.80 | 26.86 | 120 | 0.74 |
| 560 | 5.94 | 34.31 | 0.35 | 103 | 500 | 6.28 | 34.28 | 0.43 | 26.97 | 110 | 0.86 |
| 653 | 5.39 | 34.36 | 0.30 | 93 | 600 | 5.71 | 34.33 | 0.31 | 27.08 | 99 | 0.97 |
| 752 | 4.92 | 34.38 | 0.30 | 86 | 700 | 5.17 | 34.37 | 0.30 | 27.18 | 90 | 1.07 |
| 948 | 4.29 | 34.49 | 0.44 | 71 | 800 | 4.73 | 34.38 | 0.32 | 27.24 | 84 | 1.17 |
| | | | | | 1000 | (4.19) | (34.39) | | (27.30) | (78) | (1.35) |

90.45 HORIZON; February 17, 1952; 1450 GCT; 32°54.5'N, 118°56.5'W; sounding, 950 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.22 | 6.05 | | 0 | 13.9 | 33.22 | 6.05 | 24.85 | 311 | 0.00 |
| 10 | 13.98 | 33.24 | 6.01 | 311 | 10 | 13.98 | 33.24 | 6.01 | 24.85 | 311 | 0.03 |
| 24 | - | 33.24 | 6.01 | | 20 | 14.0 | 33.24 | 6.01 | 24.85 | 311 | 0.06 |
| 48 | - | 33.17 | 5.90 | | 30 | 13.8 | 33.23 | 6.00 | 24.88 | 308 | 0.09 |
| 72 | - | 33.11 | 5.55 | | 50 | 13.4 | 33.18 | 5.87 | 24.93 | 304 | 0.15 |
| 95 | 10.12 | 33.22 | 5.02 | 243 | 75 | 11.3 | 33.11 | 5.44 | 25.27 | 271 | 0.23 |
| 145 | 9.21 | 33.63 | 3.74 | 198 | 100 | 10.10 | 33.26 | 4.90 | 25.60 | 240 | 0.29 |
| 189 | 8.46 | 33.91 | 2.92 | 166 | 150 | 9.10 | 33.66 | 3.65 | 26.07 | 194 | 0.40 |
| 276 | 7.80 | 34.14 | 1.72 | 140 | 200 | 8.30 | 34.02 | 2.75 | 26.48 | 156 | 0.49 |
| 370 | 7.08 | 34.22 | 0.75 | 124 | 250 | 7.98 | 34.24 | 2.07 | 26.70 | 135 | 0.56 |
| 459 | 6.38 | 34.22 | 0.45 | 115 | 300 | 7.60 | 34.27 | 1.42 | 26.78 | 128 | 0.63 |
| 554 | 5.82 | 34.23 | 0.49 | 108 | 400 | 6.83 | 34.22 | 0.59 | 26.85 | 121 | 0.76 |
| 742 | 4.88 | 34.38 | 0.36 | 86 | 500 | 6.12 | 34.22 | 0.45 | 26.94 | 112 | 0.89 |
| 931 | 4.06 | 34.47 | 0.48 | 71 | 600 | 5.55 | 34.25 | 0.48 | 27.04 | 103 | 1.00 |
| 1133 | 3.85 | 34.49 | 0.59 | 67 | 700 | 5.06 | 34.35 | 0.37 | 27.18 | 90 | 1.10 |
| | | | | | 800 | 4.59 | 34.41 | 0.40 | 27.28 | 81 | 1.20 |
| | | | | | 1000 | 3.94 | 34.48 | 0.50 | 27.40 | 69 | 1.36 |

90.45 HORIZON; February 17, 1952; 1735 GCT; 33°00'N, 119°00'W; sounding, 950 fm; wind, 100°, force 3; weather, partly cloudy; sea, rough; wire angle, 20°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 746 | 4.86 | 34.38 | 0.34 | 86 | 800 | 4.64 | 34.38 | 0.34 | 27.24 | 84 |
| 841 | 4.51 | 34.38 | 0.36 | 82 | 1000 | 4.00 | 34.42 | 0.56 | 27.35 | 74 |
| 941 | 4.16 | 34.42 | 0.46 | 75 | 1200 | 3.82 | 34.45 | 0.57 | 27.39 | 70 |
| 1036 | 3.94 | 34.42 | 0.60 | 73 | 1500 | 3.76 | 34.45 | 0.61 | 27.40 | 69 |
| 1129 | 3.88 | 34.45 | 0.56 | 70 | | | | | | |
| 1227 | 3.80 | 34.45 | 0.58 | 70 | | | | | | |
| 1327 | 3.76 | 34.45 | 0.54 | 69 | | | | | | |
| 1422 | 3.74 | 34.45 | 0.63 | 69 | | | | | | |
| 1526 | 3.76 | 34.45 | 0.59 | 69 | | | | | | |

90.53 HORIZON; February 17, 1952; 2316 GCT; 32°39.5'N, 119°29'W; sounding, 700 fm; wind, 290°, force 5; weather, cloudy; sea, moderate; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.15 | 6.16 | | 0 | 14.0 | 33.15 | 6.16 | 24.78 | 318 | 0.00 |
| 8 | 13.99 | 33.19 | 6.11 | 315 | 10 | 14.0 | 33.19 | 6.10 | 24.81 | 315 | 0.03 |
| 22 | - | 33.15 | 6.12 | | 20 | 14.0 | 33.15 | 6.12 | 24.78 | 318 | 0.06 |
| 45 | - | 33.15 | 6.16 | | 30 | 14.0 | 33.15 | 6.17 | 24.78 | 318 | 0.10 |
| 65 | - | 33.13 | 6.02 | | 50 | 13.7 | 33.14 | 6.12 | 24.83 | 313 | 0.16 |
| 86 | 10.87 | 33.12 | 5.60 | 263 | 75 | 12.5 | 33.12 | 5.85 | 25.06 | 291 | 0.23 |
| 132 | 9.23 | 33.55 | 4.22 | 205 | 100 | 10.30 | 33.14 | 5.00 | 25.47 | 252 | 0.30 |
| 172 | 8.60 | 33.78 | 3.59 | 178 | 150 | 8.92 | 33.68 | 3.92 | 26.12 | 190 | 0.41 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

90.60 HORIZON; February 18, 1952; 0329 GCT; 32°25'N, 119°56'W; sounding, 650 fm; wind, 300°, force 5; weather, clear; sea, rough; wire angle, 38°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.21 | 6.12 | | 0 | 13.5 | 33.21 | 6.12 | 24.93 | 304 | 0.00 |
| 8 | 13.51 | 33.19 | 6.11 | 305 | 10 | 13.5 | 33.19 | 6.10 | 24.91 | 305 | 0.03 |
| 20 | - | 33.22 | 6.12 | | 20 | 13.6 | 33.22 | 6.12 | 24.92 | 305 | 0.06 |
| 40 | - | 33.22 | 6.09 | | 30 | 13.5 | 33.22 | 6.12 | 24.94 | 303 | 0.09 |
| 60 | - | 33.22 | 5.60 | | 50 | 13.5 | 33.22 | 5.98 | 24.94 | 303 | 0.15 |
| 78 | 10.50 | 33.40 | 4.45 | 236 | 75 | 10.6 | 33.38 | 4.47 | 25.61 | 239 | 0.22 |
| 118 | 9.13 | 33.57 | 4.05 | 202 | 100 | 9.60 | 33.50 | 4.20 | 25.87 | 214 | 0.28 |
| 155 | 8.55 | 33.80 | 3.49 | 176 | 150 | 8.61 | 33.78 | 3.62 | 26.25 | 178 | 0.38 |
| 229 | 7.74 | 34.04 | 2.34 | 147 | 200 | 8.08 | 34.01 | 2.70 | 26.51 | 154 | 0.46 |
| 309 | 6.81 | 34.07 | 1.59 | 132 | 250 | 7.48 | 34.05 | 2.12 | 26.62 | 142 | 0.54 |
| 389 | 6.18 | 34.16 | 0.90 | 117 | 300 | 6.90 | 34.06 | 1.67 | 26.71 | 134 | 0.61 |
| 475 | 5.76 | 34.20 | 0.53 | 109 | 400 | 6.10 | 34.16 | 0.84 | 26.90 | 116 | 0.74 |
| 560 | 5.47 | 34.29 | 0.36 | 99 | 500 | 5.69 | 34.22 | 0.47 | 27.00 | 107 | 0.86 |
| 653 | 4.89 | 34.34 | 0.32 | 89 | 600 | 5.22 | 34.32 | 0.32 | 27.13 | 94 | 0.96 |
| 841 | 4.36 | 34.42 | 0.43 | 77 | 700 | 4.70 | 34.36 | 0.35 | 27.22 | 85 | 1.06 |
| | | | | | 800 | 4.43 | 34.40 | 0.40 | 27.29 | 80 | 1.15 |
| | | | | | 1000 | (4.10) | (34.45) | | (27.36) | (73) | (1.32) |

90.70 HORIZON; February 18, 1952; 0929, 0950 GCT; 32°04.5'N, 120°39'W; sounding, 2100 fm; wind, 340°, force 5; weather, clear; sea, moderate; wire angle, 40°, 45°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.15 | 6.01 | | 0 | 14.1 | 33.15 | 6.01 | 24.76 | 320 | 0.00 |
| 8 | 14.05 | 33.12 | 6.05 | 321 | 10 | 14.0 | 33.10 | 6.06 | 24.74 | 321 | 0.03 |
| 19 | - | 33.07 | 6.05 | | 20 | 14.0 | 33.07 | 6.06 | 24.72 | 324 | 0.06 |
| | | | | | 30 | 14.0 | 33.10 | 6.05 | 24.74 | 321 | 0.10 |
| 39 | - | 33.13 | 6.04 | | 50 | 13.5 | 33.12 | 6.10 | 24.86 | 310 | 0.16 |
| 57 | - | 33.12 | 6.16 | | 75 | 13.0 | 33.17 | 5.95 | 25.00 | 297 | 0.24 |
| 78 | 12.98 | 33.17 | 5.90 | 297 | 100 | 10.20 | 33.11 | 5.49 | 25.46 | 252 | 0.31 |
| 112 | 9.63 | 33.08 | 5.25 | 246 | 150 | (9.11) | (33.58) | (4.01) | (26.01) | (201) | (0.42) |
| 147 | 9.20 | 33.51 | 4.11 | 207 | | | | | | | |

90.80 HORIZON; February 19, 1952; 1630 GCT; 31°45'N, 121°17'W; sounding, 2150 fm; wind, 300°, force 5; weather, partly cloudy; sea, rough; wire angle, 29°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.17 | 5.99 | | 0 | 14.6 | 33.17 | 5.99 | 24.67 | 328 | 0.00 |
| 9 | 14.61 | 33.24 | 6.10 | 323 | 10 | 14.6 | 33.24 | 6.10 | 24.72 | 323 | 0.03 |
| 23 | - | 33.20 | 6.01 | | 20 | 14.6 | 33.21 | 6.03 | 24.70 | 325 | 0.07 |
| 49 | - | 33.21 | 6.03 | | 30 | 14.6 | 33.20 | 6.02 | 24.69 | 326 | 0.10 |
| 70 | - | 33.21 | 6.00 | | 50 | 14.6 | 33.21 | 6.02 | 24.70 | 325 | 0.16 |
| 95 | 13.82 | 33.21 | 6.03 | 310 | 75 | 14.5 | 33.21 | 6.07 | 24.72 | 323 | 0.24 |
| 138 | 10.45 | 33.12 | 5.44 | 256 | 100 | 13.50 | 33.20 | 6.02 | 24.92 | 304 | 0.32 |
| 181 | 9.11 | 33.57 | 4.16 | 201 | 150 | 10.07 | 33.17 | 5.10 | 25.53 | 246 | 0.46 |

90.90 HORIZON; February 18, 1952; 2222 GCT; 31°25'N, 121°58'W; sounding, 2000 fm; wind, 280°, force 4; weather, partly cloudy; sea, very rough; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.19 | 5.96 | | 0 | 14.8 | 33.19 | 5.96 | 24.64 | 331 | 0.00 |
| 8 | 14.69 | 33.15 | 6.00 | 331 | 10 | 14.7 | 33.15 | 6.00 | 24.63 | 332 | 0.03 |
| 22 | - | 33.22 | 5.99 | | 20 | 14.7 | 33.22 | 6.00 | 24.69 | 327 | 0.07 |
| 48 | - | 33.19 | 5.98 | | 30 | 14.7 | 33.22 | 5.95 | 24.69 | 327 | 0.10 |
| 69 | - | 33.21 | 5.98 | | 50 | 14.7 | 33.19 | 5.96 | 24.66 | 329 | 0.16 |
| 93 | - | 33.19 | 5.98 | | 75 | 14.7 | 33.21 | 5.98 | 24.68 | 327 | 0.25 |
| 137 | 11.43 | 33.21 | 5.50 | 266 | 100 | 14.60 | 33.19 | 5.94 | 24.68 | 327 | 0.33 |
| 181 | 9.10 | 33.53 | 4.17 | 204 | 150 | 10.29 | 33.25 | 4.90 | 25.56 | 244 | 0.47 |
| 268 | 7.95 | 33.95 | 3.18 | 156 | 200 | 8.77 | 33.70 | 3.92 | 26.16 | 187 | 0.58 |
| 361 | 6.80 | 34.02 | 1.74 | 136 | 250 | 8.13 | 33.91 | 3.37 | 26.42 | 162 | 0.67 |
| 451 | 5.88 | 34.16 | 0.84 | 114 | 300 | 7.54 | 33.98 | 2.68 | 26.56 | 148 | 0.75 |
| 542 | 5.44 | 34.22 | 0.50 | 104 | 400 | 6.32 | 34.06 | 1.29 | 26.79 | 126 | 0.89 |
| 727 | 4.72 | 34.34 | 0.36 | 87 | 500 | 5.63 | 34.20 | 0.62 | 26.99 | 108 | 1.02 |
| 923 | 4.12 | 34.42 | 0.51 | 75 | 600 | 5.19 | 34.26 | 0.40 | 27.09 | 98 | 1.13 |
| 1120 | 3.61 | 34.49 | 0.76 | 65 | 700 | 4.80 | 34.32 | 0.36 | 27.18 | 90 | 1.23 |
| | | | | | 800 | 4.48 | 34.38 | 0.40 | 27.26 | 82 | 1.32 |
| | | | | | 1000 | 3.92 | 34.44 | 0.60 | 27.37 | 72 | 1.49 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **93.27** | HORIZON; February 11, 1952; 2110 GCT; 32°56'N, 117°19'W; sounding, 50 fm; wind, 260°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 14.75 | 33.21 | 5.98 | 328 | 0 | 14.75 | 33.21 | 5.98 | 24.67 | 328 | 0.00 |
| 10 | 14.48 | 33.24 | 6.04 | 321 | 10 | 14.48 | 33.24 | 6.04 | 24.75 | 321 | 0.03 |
| 20 | 14.32 | 33.21 | 6.00 | 320 | 20 | 14.32 | 33.21 | 6.00 | 24.76 | 320 | 0.06 |
| 30 | 14.18 | 33.24 | 6.09 | 315 | 30 | 14.18 | 33.24 | 6.09 | 24.81 | 315 | 0.10 |
| 50 | 13.72 | 33.23 | 5.99 | 306 | 50 | 13.72 | 33.23 | 5.99 | 24.90 | 306 | 0.16 |
| **93.30** | HORIZON; February 11, 1952; 1900 GCT; 32°52.5'N, 117°34.5'W; sounding, 485 fm; wind, 280°, force 2; weather, partly cloudy; sea, slight; wire angle, 10°. | | | | | | | | | | |
| 0 | - | 33.28 | 5.95 | | 0 | 14.6 | 33.28 | 5.95 | 24.75 | 320 | 0.00 |
| 10 | 14.34 | 33.22 | 5.95 | 319 | 10 | 14.34 | 33.22 | 5.95 | 24.76 | 319 | 0.03 |
| 25 | - | 33.26 | 5.95 | | 20 | 14.2 | 33.25 | 5.95 | 24.81 | 314 | 0.06 |
| 49 | - | 33.22 | 5.50 | | 30 | 14.2 | 33.25 | 5.91 | 24.81 | 314 | 0.10 |
| 73 | - | 33.35 | 4.64 | | 50 | 12.5 | 33.22 | 5.45 | 25.13 | 284 | 0.16 |
| 97 | 10.61 | 33.53 | 3.94 | 228 | 75 | 10.8 | 33.37 | 4.55 | 25.56 | 243 | 0.22 |
| 147 | 9.82 | 33.87 | 2.85 | 190 | 100 | 10.50 | 33.56 | 3.82 | 25.76 | 224 | 0.28 |
| 192 | 9.39 | 34.10 | 2.14 | 166 | 150 | 9.78 | 33.89 | 2.78 | 26.14 | 188 | 0.38 |
| 237 | 8.96 | 34.22 | 1.72 | 151 | 200 | 9.32 | 34.14 | 2.06 | 26.41 | 162 | 0.47 |
| 283 | 8.38 | 34.23 | 1.40 | 141 | 250 | 8.76 | 34.22 | 1.63 | 26.57 | 148 | 0.55 |
| 333 | 7.90 | 34.27 | 1.05 | 132 | 300 | 8.23 | 34.24 | 1.28 | 26.66 | 139 | 0.63 |
| 379 | 7.37 | 34.22 | 0.80 | 128 | 400 | 7.17 | 34.23 | 0.69 | 26.81 | 125 | 0.77 |
| 474 | 6.61 | 34.25 | 0.53 | 116 | 500 | 6.44 | 34.25 | 0.48 | 26.92 | 114 | 0.89 |
| 575 | 5.99 | 34.27 | 0.35 | 107 | 600 | 5.85 | 34.28 | 0.33 | 27.02 | 104 | 1.01 |
| 673 | 5.51 | 34.33 | 0.31 | 97 | 700 | (5.39) | (34.35) | | (27.14) | (94) | (1.11) |
| **93.40** | HORIZON; February 11, 1952; 1432 GCT; 32°30'N, 118°12'W; sounding, 1050 fm; wind, 320°, force 1; weather, overcast; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | - | 33.19 | 6.07 | | 0 | 14.3 | 33.19 | 6.07 | 24.75 | 321 | 0.00 |
| 10 | 14.30 | 33.21 | 6.09 | 319 | 10 | 14.30 | 33.21 | 6.09 | 24.76 | 319 | 0.03 |
| 25 | - | 33.22 | 6.01 | | 20 | 14.2 | 33.21 | 6.05 | 24.78 | 317 | 0.06 |
| 50 | - | 33.30 | 5.78 | | 30 | 14.2 | 33.23 | 5.98 | 24.80 | 316 | 0.10 |
| 74 | - | 33.22 | 4.31 | | 50 | 13.5 | 33.30 | 5.78 | 25.00 | 297 | 0.16 |
| 98 | 10.41 | 33.48 | 5.10 | 228 | 75 | 11.9 | 33.22 | 4.32 | 25.25 | 273 | 0.23 |
| 150 | 9.43 | 33.87 | 3.04 | 184 | 100 | 10.30 | 33.50 | 5.03 | 25.75 | 225 | 0.29 |
| 196 | 8.88 | 34.04 | 2.35 | 163 | 150 | 9.42 | 33.87 | 3.05 | 26.19 | 184 | 0.39 |
| 288 | 7.96 | 34.16 | 1.40 | 141 | 200 | 8.80 | 34.05 | 2.30 | 26.43 | 161 | 0.48 |
| 383 | 7.00 | 34.23 | 0.77 | 122 | 250 | 8.30 | 34.12 | 1.73 | 26.56 | 149 | 0.56 |
| 476 | 6.32 | 34.30 | 0.44 | 109 | 300 | 7.80 | 34.17 | 1.30 | 26.67 | 138 | 0.64 |
| 574 | 5.74 | 34.35 | 0.36 | 98 | 400 | 6.85 | 34.24 | 0.69 | 26.86 | 120 | 0.77 |
| 767 | 4.76 | 34.43 | 0.35 | 81 | 500 | 6.17 | 34.31 | 0.40 | 27.01 | 106 | 0.89 |
| 957 | 4.06 | 34.42 | 0.54 | 74 | 600 | 5.58 | 34.36 | 0.35 | 27.12 | 95 | 1.00 |
| 1159 | 3.65 | 34.51 | 0.74 | 64 | 700 | 5.05 | 34.41 | 0.35 | 27.22 | 85 | 1.10 |
| | | | | | 800 | 4.62 | 34.42 | 0.37 | 27.28 | 80 | 1.19 |
| | | | | | 1000 | 3.95 | 34.44 | 0.60 | 27.37 | 72 | 1.36 |
| **93.50** | HORIZON; February 11, 1952; 0911 GCT; 32°10'N, 118°53'W; sounding, 850 fm; wind, 100°, force 2; weather, cloudy; sea, missing; wire angle, 11°. | | | | | | | | | | |
| 0 | 14.30 | 33.22 | 6.00 | 318 | 0 | 14.30 | 33.22 | 6.00 | 24.77 | 318 | 0.00 |
| 10 | 14.28 | 33.28 | 6.02 | 314 | 10 | 14.28 | 33.28 | 6.02 | 24.82 | 314 | 0.03 |
| 25 | 14.10 | 33.24 | 6.01 | 313 | 20 | 14.20 | 33.25 | 6.02 | 24.81 | 314 | 0.06 |
| 49 | 13.80 | 33.22 | 6.06 | 309 | 30 | 14.10 | 33.24 | 6.00 | 24.83 | 313 | 0.09 |
| 73 | 12.40 | 33.26 | 5.51 | 279 | 50 | 13.80 | 33.25 | 6.06 | 24.90 | 306 | 0.16 |
| 97 | 11.06 | 33.30 | 4.83 | 253 | 75 | 12.50 | 33.26 | 5.50 | 25.16 | 281 | 0.23 |
| 147 | 9.71 | 33.78 | 3.29 | 195 | 100 | 11.00 | 33.36 | 4.72 | 25.52 | 247 | 0.30 |
| 192 | 9.18 | 33.98 | 2.61 | 172 | 150 | 9.67 | 33.80 | 3.20 | 26.09 | 193 | 0.41 |
| 282 | 7.86 | 34.16 | 1.46 | 139 | 200 | 9.08 | 34.00 | 2.50 | 26.34 | 169 | 0.50 |
| 378 | 6.84 | 34.25 | 0.80 | 119 | 250 | 8.32 | 34.11 | 1.84 | 26.55 | 150 | 0.58 |
| 468 | 6.22 | 34.40u | 0.48 | | 300 | 7.65 | 34.18 | 1.30 | 26.70 | 135 | 0.66 |
| 564 | 5.68 | 34.33 | 0.37 | 99 | 400 | 6.65 | 34.26 | 0.68 | 26.90 | 116 | 0.79 |
| 754 | 4.76 | - | 0.35 | | 500 | 6.03 | 34.31 | 0.40 | 27.03 | 104 | 0.90 |
| 945 | 4.18 | 34.45 | 0.49 | 73 | 600 | 5.47 | (34.34) | 0.36 | (27.12) | (95) | (1.01) |
| 1146 | 3.59 | 34.49 | 0.75 | 65 | 700 | 4.98 | (34.37) | 0.35 | (27.20) | (88) | (1.11) |
| | | | | | 800 | 4.59 | (34.42) | 0.37 | (27.28) | (80) | (1.20) |
| | | | | | 1000 | 3.96 | 34.46 | 0.54 | 27.38 | 70 | (1.37) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| HORIZON; February 11, 1952; 0332 GCT; 31°48.5'N, 119°35'W; sounding, 1200 fm; wind, 210°, force 3; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | | 93.60 |
| 0 | - | 33.21 | 5.89 | | 0 | 14.7 | 33.21 | 5.89 | 24.68 | 327 | 0.00 |
| 10 | 14.65 | 33.22 | 5.90 | 326 | 10 | 14.65 | 33.22 | 5.90 | 24.70 | 326 | 0.03 |
| 25 | - | 33.21 | 6.03 | | 20 | 14.2 | 33.21 | 6.00 | 24.78 | 317 | 0.06 |
| 49 | - | 33.19 | 6.08 | | 30 | 14.1 | 33.20 | 6.08 | 24.80 | 316 | 0.10 |
| 73 | - | 33.21 | 5.92 | | 50 | 13.9 | 33.19 | 6.08 | 24.83 | 313 | 0.16 |
| 97 | 11.62 | 33.10 | 5.60 | 277 | 75 | 13.4 | 33.21 | 5.91 | 24.95 | 302 | 0.24 |
| 147 | 9.61 | 33.48 | 4.50 | 216 | 100 | 11.30 | 33.10 | 5.56 | 25.26 | 271 | 0.31 |
| 192 | 8.55 | 33.82 | 3.49 | 174 | 150 | 9.50 | 33.52 | 4.41 | 25.90 | 211 | 0.43 |
| 281 | 7.72 | 34.07 | 2.28 | 144 | 200 | 8.48 | 33.86 | 3.39 | 26.33 | 170 | 0.53 |
| 375 | 6.69 | 34.13 | 1.26 | 126 | 250 | 8.00 | 34.03 | 2.64 | 26.53 | 151 | 0.61 |
| 467 | 6.22 | 34.23 | 0.63 | 113 | 300 | 7.49 | 34.08 | 2.09 | 26.65 | 140 | 0.69 |
| 562 | 5.58 | 34.29 | 0.36 | 100 | 400 | 6.51 | 34.16 | 1.02 | 26.84 | 121 | 0.82 |
| 753 | 4.66 | 34.40 | 0.35 | 82 | 500 | 6.00 | 34.26 | 0.52 | 26.99 | 108 | 0.94 |
| 942 | 4.09 | 34.45 | 0.56 | 72 | 600 | 5.36 | 34.31 | 0.35 | 27.11 | 96 | 1.05 |
| 1144 | 3.64 | 34.51 | 0.75 | 64 | 700 | 4.87 | 34.37 | 0.35 | 27.21 | 87 | 1.15 |
| | | | | | 800 | 4.50 | 34.42 | 0.40 | 27.29 | 79 | 1.24 |
| | | | | | 1000 | 3.95 | 34.46 | 0.60 | 27.38 | 70 | 1.41 |
| HORIZON; February 10, 1952; 2218 GCT; 31°28'N, 120°15'W; sounding, 2150 fm; wind, 290°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | | 93.70 |
| 0 | - | 33.12 | 5.95 | | 0 | 14.5 | 33.12 | 5.95 | 24.65 | 330 | 0.00 |
| 10 | 14.22 | 33.19 | 5.98 | 319 | 10 | 14.22 | 33.19 | 5.98 | 24.76 | 319 | 0.03 |
| 25 | - | 33.19 | 6.02 | | 20 | 14.2 | 33.19 | 6.02 | 24.77 | 319 | 0.06 |
| 49 | - | 33.21 | 5.92 | | 30 | 13.7 | 33.19 | 6.01 | 24.87 | 309 | 0.10 |
| 73 | - | 33.10 | 5.75 | | 50 | 13.4 | 33.21 | 5.92 | 24.95 | 302 | 0.16 |
| 96 | 11.04 | 33.06 | 5.38 | 270 | 75 | 12.7 | 33.09 | 5.71 | 24.99 | 297 | 0.23 |
| 146 | 9.22 | 33.42 | 4.26 | 214 | 100 | 11.00 | 33.06 | 5.23 | 25.29 | 269 | 0.30 |
| 191 | 8.56 | 33.78 | 3.42 | 178 | 150 | 9.13 | 33.46 | 4.19 | 25.91 | 210 | 0.42 |
| 280 | 8.11 | 34.14 | 1.63 | 144 | 200 | 8.49 | 33.86 | 3.20 | 26.33 | 171 | 0.52 |
| 373 | 7.08 | 34.20 | 0.97 | 126 | 250 | 8.26 | 34.07 | 2.10 | 26.53 | 152 | 0.60 |
| 465 | 6.07 | 34.20 | 0.64 | 113 | 300 | 7.96 | 34.17 | 1.43 | 26.65 | 140 | 0.68 |
| 559 | 5.56 | 34.27 | 0.41 | 102 | 400 | 6.72 | 34.20 | 0.87 | 26.85 | 121 | 0.82 |
| 750 | 4.81 | 34.42 | 0.34 | 82 | 500 | 5.87 | 34.22 | 0.53 | 26.97 | 109 | 0.94 |
| 941 | 4.18 | 34.43 | 0.52 | 75 | 600 | 5.38 | 34.32 | 0.38 | 27.11 | 96 | 1.05 |
| 1141 | 3.78 | 34.49 | 0.67 | 66 | 700 | 5.00 | 34.40 | 0.34 | 27.22 | 86 | 1.14 |
| | | | | | 800 | 4.63 | 34.42 | 0.38 | 27.28 | 80 | 1.23 |
| | | | | | 1000 | 4.02 | 34.44 | 0.57 | 27.36 | 72 | 1.40 |
| HORIZON; February 9, 1952; 1713 GCT; 32°15'N, 117°08.5'W; sounding, 30 fm; wind, 090°, force 3; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | 97.30 |
| 0 | 13.99 | 33.24 | 6.01 | 311 | 0 | 13.99 | 33.24 | 6.01 | 24.85 | 311 | 0.00 |
| 10 | 13.98 | 33.22 | 6.00 | 312 | 10 | 13.98 | 33.22 | 6.00 | 24.84 | 312 | 0.03 |
| 20 | 13.98 | 33.22 | 5.94 | 312 | 20 | 13.98 | 33.22 | 5.94 | 24.84 | 312 | 0.06 |
| 25 | 13.94 | 33.21 | 5.96 | 312 | 30 | 13.48 | 33.28 | 5.69 | 24.99 | 298 | 0.09 |
| 30 | 13.48 | 33.28 | 5.69 | 298 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **97.32** | HORIZON; February 9, 1952; 1908 GCT; 32°11.5'N, 117°18'W; sounding, 800 fm; wind, 160°, force 4; weather, intermittent moderate rain; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | - | 33.28 | 5.99 | | 0 | 14.3 | 33.28 | 5.99 | 24.82 | 314 | 0.00 |
| 9 | 14.28 | 33.28 | 5.96 | 314 | 10 | 14.3 | 33.28 | 5.96 | 24.82 | 314 | 0.03 |
| 23 | - | 33.26 | 5.91 | | 20 | 14.2 | 33.26 | 5.93 | 24.82 | 314 | 0.06 |
| 50 | - | 33.24 | 5.80 | | 30 | 14.2 | 33.25 | 5.89 | 24.81 | 314 | 0.09 |
| 72 | - | 33.39 | 4.80 | | 50 | 13.5 | 33.24 | 5.80 | 24.95 | 301 | 0.16 |
| 98 | 10.38 | 33.40 | 4.40 | 234 | 75 | 11.8 | 33.39 | 4.75 | 25.40 | 259 | 0.23 |
| 144 | 9.29 | 33.77 | 3.52 | 189 | 100 | 10.30 | 33.40 | 4.35 | 25.67 | 233 | 0.29 |
| 188 | 8.76 | 33.98 | 2.35 | 166 | 150 | 9.17 | 33.81 | 3.28 | 26.18 | 184 | 0.39 |
| 280 | 8.61 | 34.23 | 1.27 | 145 | 200 | 8.70 | 34.02 | 2.12 | 26.42 | 162 | 0.48 |
| 376 | 7.32 | 34.23 | 0.84 | 127 | 250 | 8.65 | 34.17 | 1.50 | 26.54 | 150 | 0.56 |
| 469 | 6.59 | 34.27 | 0.49 | 114 | 300 | 8.40 | 34.23 | 1.18 | 26.63 | 142 | 0.64 |
| 564 | 5.94 | 34.30 | 0.35 | 104 | 400 | 7.09 | 34.24 | 0.73 | 26.83 | 123 | 0.78 |
| 752 | 4.92 | 34.38 | 0.32 | 86 | 500 | 6.36 | 34.28 | 0.43 | 26.96 | 111 | 0.90 |
| 948 | 4.14 | 34.43 | 0.52 | 74 | 600 | 5.73 | 34.31 | 0.33 | 27.06 | 101 | 1.01 |
| 1146 | 3.56 | 34.51 | 0.76 | 63 | 700 | 5.20 | 34.36 | 0.32 | 27.17 | 91 | 1.12 |
| | | | | | 800 | 4.70 | 34.40 | 0.35 | 27.26 | 82 | 1.21 |
| | | | | | 1000 | 3.97 | 34.45 | 0.59 | 27.37 | 71 | 1.38 |
| **97.40** | HORIZON; February 10, 1952; 0034 GCT; 31°58'N, 117°50.5'W; sounding, 755 fm; wind, 340°, force 1; weather, partly cloudy; sea, indistinguishable; wire angle, 05°. | | | | | | | | | | |
| 0 | - | 33.21 | 5.92 | | 0 | 14.6 | 33.21 | 5.92 | 24.70 | 325 | 0.00 |
| 10 | 14.21 | 33.19 | 5.94 | 319 | 10 | 14.21 | 33.19 | 5.94 | 24.77 | 319 | 0.03 |
| 25 | - | 33.19 | 5.92 | | 20 | 14.1 | 33.19 | 5.93 | 24.79 | 317 | 0.06 |
| 50 | - | 33.17 | 5.90 | | 30 | 14.0 | 33.19 | 5.93 | 24.81 | 315 | 0.10 |
| 75 | - | 33.06 | 5.52 | | 50 | 13.4 | 33.17 | 5.90 | 24.92 | 305 | 0.16 |
| 99 | 10.10 | 33.17 | 4.94 | 246 | 75 | 11.8 | 33.06 | 5.52 | 25.14 | 283 | 0.23 |
| 149 | 9.15 | 33.64 | 3.78 | 197 | 100 | 10.10 | 33.18 | 4.92 | 25.54 | 246 | 0.30 |
| 196 | 8.72 | 33.96 | 2.76 | 167 | 150 | 9.13 | 33.64 | 3.72 | 26.05 | 196 | 0.41 |
| 287 | 7.54 | 34.07 | 2.07 | 142 | 200 | 8.65 | 33.97 | 2.75 | 26.39 | 165 | 0.50 |
| 384 | 7.10 | 34.22 | - | 125 | 250 | 7.93 | 34.04 | 2.41 | 26.55 | 149 | 0.58 |
| 476 | 6.40 | 34.22 | 0.45 | 116 | 300 | 7.46 | 34.09 | 1.85 | 26.66 | 139 | 0.66 |
| 574 | 5.82 | 34.36 | 0.35 | 98 | 400 | 6.97 | 34.22 | 0.85 | 26.83 | 123 | 0.79 |
| 767 | 4.69 | 34.42 | 0.36 | 81 | 500 | 6.26 | 34.24 | 0.40 | 26.94 | 112 | 0.92 |
| 959 | 3.98 | 34.43 | 0.56 | 73 | 600 | 5.67 | 34.38 | 0.35 | 27.13 | 95 | 1.03 |
| 1159 | 3.46 | 34.51 | 0.87 | 62 | 700 | 5.12 | 34.41 | 0.35 | 27.22 | 86 | 1.13 |
| | | | | | 800 | 4.65 | 34.42 | 0.39 | 27.28 | 80 | 1.22 |
| | | | | | 1000 | 3.83 | 34.44 | 0.62 | 27.38 | 71 | 1.39 |
| **97.50** | HORIZON; February 10, 1952; 0632 GCT; 31°35'N, 118°30.5'W; sounding, 1400 fm; wind, 360°, force 1; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 33.21 | 5.92 | | 0 | 14.7 | 33.21 | 5.92 | 24.68 | 327 | 0.00 |
| 10 | 14.62 | 33.22 | 5.91 | 325 | 10 | 14.62 | 33.22 | 5.91 | 24.70 | 325 | 0.03 |
| 25 | - | 33.21 | 5.93 | | 20 | 14.5 | 33.21 | 5.91 | 24.72 | 323 | 0.07 |
| 50 | - | 33.21 | 5.89 | | 30 | 14.5 | 33.21 | 5.92 | 24.72 | 323 | 0.10 |
| 74 | - | 33.21 | 5.71 | | 50 | 14.3 | 33.21 | 5.89 | 24.76 | 319 | 0.16 |
| 98 | 11.86 | 33.30 | 5.03 | 267 | 75 | 13.6 | 33.21 | 5.67 | 24.91 | 305 | 0.24 |
| 150 | 9.32 | 33.57 | 3.92 | 205 | 100 | 11.80 | 33.31 | 4.99 | 25.34 | 265 | 0.31 |
| 196 | 8.68 | 33.96 | 2.86 | 166 | 150 | 9.32 | 33.57 | 3.92 | 25.97 | 205 | 0.43 |
| 289 | 7.54 | 34.09 | 1.96 | 140 | 200 | 8.61 | 33.97 | 2.83 | 26.39 | 164 | 0.52 |
| 386 | 7.00 | 34.20 | 0.79 | 125 | 250 | 7.93 | 34.04 | 2.38 | 26.55 | 149 | 0.60 |
| 479 | 6.37 | 34.29 | 0.49 | 110 | 300 | 7.46 | 34.10 | 1.79 | 26.67 | 138 | 0.68 |
| 577 | 5.80 | 34.31 | 0.33 | 101 | 400 | 6.90 | 34.22 | 0.73 | 26.84 | 122 | 0.81 |
| 771 | 4.67 | 34.40 | 0.34 | 82 | 500 | 6.23 | 34.30 | 0.44 | 26.99 | 107 | 0.94 |
| 964 | 3.99 | 34.45 | 0.55 | 71 | 600 | 5.65 | 34.31 | 0.33 | 27.07 | 100 | 1.05 |
| 1165 | 3.51 | 34.51 | 0.78 | 62 | 700 | 5.05 | 34.36 | 0.33 | 27.18 | 89 | 1.15 |
| | | | | | 800 | 4.53 | 34.41 | 0.37 | 27.28 | 80 | 1.24 |
| | | | | | 1000 | 3.90 | 34.46 | 0.59 | 27.39 | 70 | 1.41 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| HORIZON; February 10, 1952; 1233 GCT; 31°15'N, 119°08'W; sounding, 2050 fm; wind, 110°, force 2; weather, clear; sea, slight; wire angle, 11°. | | | | | | | | | | | 97.60 |
| 0 | - | 33.42 | 5.92 | | 0 | 14.9 | 33.42 | 5.92 | 24.80 | 316 | 0.00 |
| 10 | 14.88 | 33.39 | 5.95 | 318 | 10 | 14.88 | 33.39 | 5.95 | 24.78 | 318 | 0.03 |
| 25 | - | 33.46 | 5.97 | | 20 | 14.8 | 33.45 | 5.97 | 24.84 | 312 | 0.06 |
| 49 | - | 33.44 | 5.92 | | 30 | 14.8 | 33.46 | 5.98 | 24.85 | 311 | 0.09 |
| 73 | - | 33.35 | 5.23 | | 50 | 14.7 | 33.43 | 5.91 | 24.85 | 311 | 0.16 |
| 97 | 11.12 | 33.44 | 4.41 | 243 | 75 | 13.0 | 33.35 | 5.10 | 25.14 | 284 | 0.23 |
| 147 | 9.95 | 33.95 | 3.54 | 186 | 100 | 11.10 | 33.51 | 4.36 | 25.62 | 238 | 0.30 |
| 193 | 9.10 | 34.07 | 2.32 | 164 | 150 | 9.85 | 33.97 | 3.41 | 26.19 | 183 | 0.40 |
| 284 | 8.44 | 34.25 | 1.29 | 141 | 200 | 9.03 | 34.09 | 2.22 | 26.42 | 162 | 0.49 |
| 379 | 7.22 | 34.25 | 0.85 | 124 | 250 | 8.72 | 34.23 | 1.57 | 26.58 | 146 | 0.57 |
| 470 | 6.44 | 34.29 | 0.48 | 111 | 300 | 8.20 | 34.25 | 1.22 | 26.68 | 137 | 0.64 |
| 567 | 5.72 | 34.34 | 0.41 | 98 | 400 | 7.03 | 34.26 | 0.73 | 26.85 | 121 | 0.78 |
| 757 | 4.76 | 34.40 | 0.36 | 83 | 500 | 6.19 | 34.31 | 0.45 | 27.00 | 106 | 0.90 |
| 948 | 4.16 | 34.44 | 0.47 | 74 | 600 | 5.52 | 34.35 | 0.40 | 27.12 | 95 | 1.01 |
| 1148 | 3.65 | 34.51 | 0.87 | 64 | 700 | 5.00 | 34.39 | 0.38 | 27.21 | 86 | 1.11 |
| | | | | | 800 | 4.60 | 34.41 | 0.36 | 27.27 | 81 | 1.20 |
| | | | | | 1000 | 4.02 | 34.45 | 0.55 | 27.37 | 72 | 1.37 |
| HORIZON; February 10, 1952; 1730 GCT; 30°56'N, 119°50.5'W; sounding, 2020 fm; wind, 280°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 97.70 |
| 0 | - | 33.19 | 5.94 | | 0 | 14.5 | 33.19 | 5.94 | 24.71 | 325 | 0.00 |
| 10 | 14.45 | 33.15 | 5.96 | 327 | 10 | 14.45 | 33.15 | 5.96 | 24.69 | 327 | 0.03 |
| 25 | - | 33.21 | 6.01 | | 20 | 14.4 | 33.20 | 5.98 | 24.73 | 322 | 0.07 |
| 50 | - | 33.19 | 6.27 | | 30 | 14.3 | 33.22 | 6.09 | 24.77 | 318 | 0.10 |
| 75 | - | 33.19 | 5.98 | | 50 | 13.9 | 33.19 | 6.27 | 24.83 | 313 | 0.16 |
| 99 | 11.20 | 33.12 | 5.54 | 268 | 75 | 13.5 | 33.19 | 5.98 | 24.91 | 305 | 0.24 |
| 150 | 8.97 | 33.60 | 4.21 | 197 | 100 | 11.20 | 33.12 | 5.50 | 25.30 | 268 | 0.31 |
| 196 | 8.36 | 33.89 | 3.40 | 166 | 150 | 8.97 | 33.60 | 4.21 | 26.05 | 197 | 0.43 |
| 288 | 7.55 | 34.07 | 1.95 | 142 | 200 | 8.30 | 33.90 | 3.31 | 26.39 | 165 | 0.52 |
| 386 | 6.34 | 34.20 | 0.90 | 116 | 250 | 7.88 | 34.01 | 2.50 | 26.54 | 151 | 0.60 |
| 480 | 5.96 | 34.27 | 0.45 | 106 | 300 | 7.36 | 34.09 | 1.80 | 26.67 | 138 | 0.67 |
| 578 | 5.42 | 34.31 | 0.33 | 97 | 400 | 6.27 | 34.21 | 0.80 | 26.92 | 115 | 0.81 |
| 773 | 4.54 | 34.42 | 0.35 | 79 | 500 | 5.87 | 34.28 | 0.43 | 27.02 | 105 | 0.92 |
| 966 | 3.92 | 34.45 | 0.58 | 71 | 600 | 5.30 | 34.32 | 0.33 | 27.12 | 95 | 1.03 |
| 1168 | 3.53 | 34.49 | 0.85 | 64 | 700 | 4.83 | 34.38 | 0.33 | 27.23 | 85 | 1.13 |
| | | | | | 800 | 4.44 | 34.43 | 0.38 | 27.31 | 77 | 1.22 |
| | | | | | 1000 | 3.83 | 34.45 | 0.62 | 27.39 | 70 | 1.38 |
| HORIZON; February 9, 1952; 1339 GCT; 31°42'N, 116°44'W; sounding, 45 fm; wind, 090°, force 5; weather, overcast; sea, missing; wire angle, 07°. | | | | | | | | | | | 100.29 |
| 0 | 13.76 | 33.28 | 5.99 | 303 | 0 | 13.76 | 33.28 | 5.99 | 24.93 | 303 | 0.00 |
| 10 | 13.84 | 33.35 | 6.03 | 300 | 10 | 13.84 | 33.35 | 6.03 | 24.97 | 300 | 0.03 |
| 20 | 13.60 | 33.33 | 5.94 | 297 | 20 | 13.60 | 33.33 | 5.94 | 25.00 | 297 | 0.06 |
| 30 | 13.55 | 33.37 | 5.91 | 293 | 30 | 13.55 | 33.37 | 5.91 | 25.04 | 293 | 0.09 |
| 50 | 13.18 | 33.40 | 5.59 | 283 | 50 | 13.18 | 33.40 | 5.59 | 25.14 | 283 | 0.15 |
| HORIZON; February 9, 1952; 1226 GCT; 31°41'N, 116°46'W; sounding, 150 fm; wind, 110°, force 6; weather, rain; sea, slight; wire angle, 27°. | | | | | | | | | | | 100.30 |
| 0 | 13.93 | 33.22 | 5.99 | 311 | 0 | 13.93 | 33.22 | 5.99 | 24.85 | 311 | 0.00 |
| 9 | 14.05 | 33.33 | 6.07 | 305 | 10 | 14.05 | 33.33 | 6.08 | 24.91 | 305 | 0.03 |
| 22 | 13.68 | 33.37 | 6.09 | 295 | 20 | 13.80 | 33.37 | 6.09 | 24.99 | 298 | 0.06 |
| 43 | 13.12 | 33.39 | 5.63 | 283 | 30 | 13.45 | 33.38 | 6.03 | 25.07 | 290 | 0.09 |
| 63 | 12.53 | 33.40 | 4.94 | 271 | 50 | 12.94 | 33.39 | 5.39 | 25.18 | 280 | 0.15 |
| 82 | 12.04 | 33.46 | 4.51 | 258 | 75 | 12.20 | 33.42 | 4.65 | 25.35 | 264 | 0.22 |
| 126 | 11.06 | 33.58 | 3.80 | 232 | 100 | 11.64 | 33.49 | 4.28 | 25.50 | 249 | 0.28 |
| 171 | 9.71 | 34.07 | 1.93 | 174 | 150 | 10.45 | 33.84 | 2.94 | 25.99 | 203 | 0.39 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 100.40 | HORIZON; February 9, 1952; 0704 GCT; 31°20.5'N, 117°24'W; sounding, 1000 fm; wind, 090°, force 4; weather, intermittent moderate rain; sea, indistinguishable; wire angle, 22°. | | | | | | | | | | |
| 0 | - | 33.10 | 5.99 | | 0 | 14.4 | 33.10 | 5.99 | 24.66 | 329 | 0.00 |
| 9 | 14.34 | 33.26 | 6.02 | 316 | 10 | 14.3 | 33.26 | 6.02 | 24.80 | 316 | 0.03 |
| 23 | - | 33.21 | 6.02 | | 20 | 14.3 | 33.22 | 6.02 | 24.77 | 318 | 0.06 |
| 47 | - | 33.24 | 6.05 | | 30 | 14.2 | 33.21 | 6.01 | 24.78 | 317 | 0.10 |
| 69 | - | 33.30 | 4.94 | | 50 | 13.8 | 33.24 | 6.03 | 24.89 | 307 | 0.16 |
| 92 | 11.70 | 33.44 | 4.41 | 253 | 75 | 12.2 | 33.33 | 4.82 | 25.28 | 270 | 0.23 |
| 140 | 10.48 | 33.80 | 2.92 | 206 | 100 | 11.40 | 33.50 | 4.00 | 25.56 | 244 | 0.30 |
| 183 | 9.41 | 34.00 | 2.66 | 174 | 150 | 10.12 | 33.85 | 2.87 | 26.05 | 196 | 0.41 |
| 269 | 8.92 | 34.27 | 1.20 | 147 | 200 | 9.26 | 34.09 | 2.27 | 26.38 | 165 | 0.50 |
| 359 | 7.66 | 34.23 | 0.97 | 131 | 250 | 9.07 | 34.26 | 1.34 | 26.55 | 150 | 0.58 |
| 446 | 6.79 | 34.29 | 0.60 | 115 | 300 | 8.53 | 34.26 | 1.12 | 26.63 | 141 | 0.66 |
| 539 | 6.08 | 34.34 | 0.36 | 103 | 400 | 7.21 | 34.25 | 0.79 | 26.82 | 124 | 0.79 |
| 723 | 5.01 | 34.38 | 0.33 | 87 | 500 | 6.37 | 34.32 | 0.43 | 26.99 | 108 | 0.92 |
| 909 | 4.27 | 34.43 | 0.48 | 76 | 600 | 5.67 | 34.36 | 0.33 | 27.11 | 96 | 1.03 |
| 1107 | 3.73 | 34.47 | 0.83 | 67 | 700 | 5.12 | 34.37 | 0.33 | 27.18 | 89 | 1.13 |
| | | | | | 800 | 4.68 | 34.40 | 0.38 | 27.26 | 82 | 1.22 |
| | | | | | 1000 | 3.98 | 34.45 | 0.62 | 27.37 | 71 | 1.39 |
| 100.50 | HORIZON; February 9, 1952; 0128 GCT; 30°56'N, 118°04'W; sounding, 850 fm; wind, 170°, force 3; weather, overcast; sea, indistinguishable; wire angle, 14°. | | | | | | | | | | |
| 0 | - | 33.24 | 5.92 | | 0 | 14.7 | 33.24 | 5.92 | 24.70 | 325 | 0.00 |
| 10 | 14.61 | 33.26 | 5.95 | 322 | 10 | 14.61 | 33.26 | 5.95 | 24.74 | 322 | 0.03 |
| 24 | - | 33.22 | 5.99 | | 20 | 14.5 | 33.23 | 5.98 | 24.74 | 322 | 0.06 |
| 53 | - | 33.22 | 5.96 | | 30 | 14.4 | 33.22 | 6.00 | 24.75 | 320 | 0.10 |
| 77 | - | 33.12 | 5.62 | | 50 | 14.3 | 33.22 | 5.97 | 24.77 | 318 | 0.16 |
| 106 | 11.12 | 33.46 | 4.10 | 242 | 75 | 12.6 | 33.12 | 5.67 | 25.04 | 293 | 0.24 |
| 156 | 10.22 | 33.96 | 2.54 | 190 | 100 | 11.2 | 33.37 | 4.67 | 25.49 | 250 | 0.31 |
| 207 | 9.66 | 34.16 | 1.87 | 166 | 150 | 10.30 | 33.92 | 2.67 | 26.08 | 194 | 0.42 |
| 307 | 8.19 | 34.20 | 1.54 | 141 | 200 | 9.72 | 34.15 | 1.93 | 26.36 | 168 | 0.51 |
| 413 | 6.86 | 34.23 | 0.86 | 121 | 250 | 9.14 | 34.19 | 1.69 | 26.48 | 156 | 0.59 |
| 514 | 6.32 | 34.31 | 0.41 | 108 | 300 | 8.30 | 34.20 | 1.58 | 26.62 | 143 | 0.67 |
| 615 | 5.72 | 34.34 | 0.31 | 98 | 400 | 6.98 | 34.22 | 0.95 | 26.83 | 123 | 0.81 |
| 814 | 4.67 | 34.42 | 0.38 | 81 | 500 | 6.39 | 34.30 | 0.45 | 26.97 | 109 | 0.93 |
| 1018 | 3.96 | 34.45 | 0.63 | 71 | 600 | 5.80 | 34.34 | 0.31 | 27.08 | 99 | 1.04 |
| 1219 | 3.47 | 34.52 | 0.88 | 61 | 700 | 5.21 | 34.37 | 0.32 | 27.17 | 90 | 1.15 |
| | | | | | 800 | 4.74 | 34.42 | 0.38 | 27.27 | 81 | 1.24 |
| | | | | | 1000 | 4.01 | 34.45 | 0.61 | 27.37 | 72 | 1.41 |
| 100.60 | HORIZON; February 8, 1952; 2000 GCT; 30°45'N, 118°49'W; sounding, 1800 fm; wind, 090°, force 4; weather, intermittent light rain; sea, moderate; wire angle, 22°. | | | | | | | | | | |
| 0 | - | 33.34 | 5.86 | | 0 | 15.1 | 33.34 | 5.85 | 24.69 | 326 | 0.00 |
| 9 | 15.12 | 33.37 | 5.82 | 324 | 10 | 15.1 | 33.37 | 5.81 | 24.72 | 324 | 0.03 |
| 23 | - | 33.35 | 5.85 | | 20 | 15.0 | 33.35 | 5.83 | 24.72 | 323 | 0.06 |
| 52 | - | 33.33 | 5.86 | | 30 | 15.0 | 33.35 | 5.88 | 24.72 | 323 | 0.10 |
| 74 | - | 33.35 | 5.85 | | 50 | 14.9 | 33.33 | 5.86 | 24.73 | 323 | 0.16 |
| 100 | 11.87 | 33.21 | 5.41 | 273 | 75 | 14.3 | 33.35 | 5.82 | 24.87 | 309 | 0.24 |
| 145 | 9.64 | 33.58 | 3.97 | 209 | 100 | 11.87 | 33.21 | 5.41 | 25.25 | 273 | 0.31 |
| 188 | 9.18 | 33.89 | 3.07 | 179 | 150 | 9.59 | 33.63 | 3.82 | 25.97 | 204 | 0.44 |
| 277 | 8.20 | 34.16 | 1.78 | 144 | 200 | 9.02 | 33.95 | 2.90 | 26.31 | 172 | 0.53 |
| 372 | 7.44 | 34.33 | 0.78 | 121 | 250 | 8.45 | 34.09 | 2.20 | 26.51 | 153 | 0.61 |
| 463 | 6.70 | 34.31 | 0.37 | 113 | 300 | 8.01 | 34.22 | 1.46 | 26.68 | 137 | 0.69 |
| 554 | 6.06 | 34.33 | 0.27 | 103 | 400 | 7.20 | 34.33 | 0.63 | 26.88 | 118 | 0.82 |
| 740 | 4.87 | 34.38 | 0.33 | 86 | 500 | 6.44 | 34.31 | 0.32 | 26.97 | 109 | 0.94 |
| 935 | 4.14 | 34.45 | 0.53 | 73 | 600 | 5.73 | 34.35 | 0.27 | 27.09 | 98 | 1.05 |
| 1131 | 3.59 | 34.52 | 0.76 | 62 | 700 | 5.08 | 34.37 | 0.30 | 27.19 | 89 | 1.15 |
| | | | | | 800 | 4.61 | 34.39 | 0.37 | 27.26 | 82 | 1.25 |
| | | | | | 1000 | 3.95 | 34.48 | 0.60 | 27.40 | 69 | 1.42 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

HORIZON; February 8, 1952; 1437 GCT; 30°12'N, 119°13'W; sounding, 2100 fm; wind, 170°, force 4; weather, partly cloudy; sea, slight; wire angle, 28°. 100.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.35 | 5.82 | | 0 | 15.0 | 33.35 | 5.82 | 24.72 | 323 | 0.00 |
| 9 | 15.03 | 33.33 | 5.79 | 325 | 10 | 15.0 | 33.33 | 5.79 | 24.71 | 325 | 0.03 |
| 22 | - | 33.31 | 5.89 | | 20 | 15.0 | 33.31 | 5.87 | 24.69 | 326 | 0.06 |
| 44 | - | 33.31 | 5.94 | | 30 | 14.8 | 33.31 | 5.91 | 24.73 | 322 | 0.10 |
| 66 | - | 33.31 | 5.88 | | 50 | 14.5 | 33.31 | 5.92 | 24.80 | 316 | 0.16 |
| 87 | 12.10 | 33.17 | 5.44 | 280 | 75 | 14.5 | 33.28 | 5.65 | 24.77 | 318 | 0.24 |
| 130 | 9.81 | 33.44 | 4.44 | 222 | 100 | 11.40 | 33.17 | 5.18 | 25.30 | 268 | 0.31 |
| 169 | 9.02 | 33.78 | 3.28 | 184 | 150 | 9.28 | 33.65 | 3.70 | 26.04 | 198 | 0.43 |
| 244 | 8.34 | 34.04 | 2.26 | 155 | 200 | 8.82 | 33.93 | 2.72 | 26.33 | 170 | 0.53 |
| 327 | 7.28 | 34.11 | 1.55 | 135 | 250 | 8.25 | 34.05 | 2.22 | 26.51 | 153 | 0.61 |
| 404 | 6.80 | 34.16 | 0.83 | 125 | 300 | 7.55 | 34.10 | 1.81 | 26.65 | 139 | 0.68 |
| 487 | 6.24 | 34.31u | 0.45 | | 400 | 6.81 | 34.16 | 0.85 | 26.80 | 125 | 0.82 |
| 652 | 5.32 | 34.36 | 0.28 | 92 | 500 | 6.16 | 34.28 | 0.41 | 26.99 | 108 | 0.95 |
| 827 | 4.50 | 34.42 | 0.43 | 79 | 600 | 5.61 | 34.35 | 0.28 | 27.11 | 96 | 1.05 |
| 1022 | 3.94 | 34.47 | 0.68 | 69 | 700 | 5.08 | 34.37 | 0.31 | 27.19 | 89 | 1.15 |
| | | | | | 800 | 4.60 | 34.41 | 0.40 | 27.27 | 81 | 1.25 |
| | | | | | 1000 | 4.00 | 34.47 | 0.65 | 27.39 | 70 | 1.42 |

HORIZON; February 8, 1952; 0907, 0925 GCT; 29°51.5'N, 119°53'W; sounding, 2100 fm; wind, 180°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°, 00°. 100.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.24 | 5.97 | | 0 | 14.6 | 33.24 | 5.97 | 24.72 | 323 | 0.00 |
| 10 | 14.62 | 33.31 | 5.96 | 318 | 10 | 14.62 | 33.31 | 5.96 | 24.77 | 318 | 0.03 |
| 25 | - | 33.24 | 5.99 | | 20 | 14.5 | 33.26 | 5.99 | 24.76 | 320 | 0.06 |
| 50 | - | 34.28 | 5.97 | | 30 | 14.2 | 33.24 | 5.99 | 24.81 | 315 | 0.10 |
| 75 | - | 33.15 | 5.65 | | 50 | 14.1 | 33.28 | 5.97 | 24.86 | 310 | 0.16 |
| 99 | 10.90 | 33.22 | 5.06 | 256 | 75 | 13.1 | 33.15 | 5.65 | 24.96 | 300 | 0.24 |
| 150 | 9.73 | 33.78 | 3.34 | 195 | 100 | 10.90 | 33.23 | 5.03 | 25.44 | 255 | 0.30 |
| | | | | | 150 | 9.73 | 33.78 | 3.34 | 26.07 | 195 | 0.42 |
| 196 | 8.90 | 33.96 | 1.95 | 169 | 200 | 8.82 | 33.97 | 1.91 | 26.36 | 167 | 0.51 |
| 290 | 7.76 | 34.13 | 1.66 | 140 | 250 | 8.18 | 34.09 | 1.80 | 26.55 | 149 | 0.59 |
| 387 | 6.77 | 34.16 | 0.84 | 125 | 300 | 7.65 | 34.13 | 1.55 | 26.66 | 139 | 0.67 |
| 479 | 5.81 | 34.14 | 0.55 | 114 | 400 | 6.58 | 34.16 | 0.80 | 26.84 | 122 | 0.80 |
| 578 | 5.36 | 34.27 | 0.36 | 99 | 500 | 5.68 | 34.15 | 0.48 | 26.94 | 112 | 0.93 |
| 771 | 4.62 | 34.38 | 0.41 | 83 | 600 | 5.28 | 34.29 | 0.36 | 27.10 | 97 | 1.04 |
| 963 | 3.97 | 34.43 | 0.58 | 73 | 700 | 4.90 | 34.37 | 0.37 | 27.21 | 87 | 1.14 |
| 1164 | 3.47 | 34.51 | 0.82 | 62 | 800 | 4.52 | 34.39 | 0.42 | 27.27 | 81 | 1.23 |
| | | | | | 1000 | 3.85 | 34.44 | 0.62 | 27.38 | 71 | 1.40 |

HORIZON; February 8, 1952; 0330, 0357 GCT; 29°30'N, 120°33'W; sounding, 2220 fm; wind, 210°, force 2; weather, partly cloudy; sea, indistinguishable; wire angle, 08°, 09°. 100.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.20 | 5.87 | | 0 | 15.1 | 33.20 | 5.87 | 24.58 | 336 | 0.00 |
| 10 | 14.99 | 33.21 | 5.89 | 333 | 10 | 14.99 | 33.21 | 5.89 | 24.62 | 333 | 0.03 |
| 25 | - | 33.19 | 5.90 | | 20 | 14.9 | 33.20 | 5.90 | 24.63 | 332 | 0.07 |
| 50 | - | 33.19 | 5.89 | | 30 | 14.7 | 33.19 | 5.90 | 24.66 | 329 | 0.10 |
| 74 | - | 33.19 | 5.87 | | 50 | 14.5 | 33.19 | 5.89 | 24.71 | 325 | 0.17 |
| 98 | 11.72 | 33.03 | 5.73 | 284 | 75 | 14.0 | 33.19 | 5.87 | 24.81 | 315 | 0.25 |
| 149 | 10.01 | 33.48 | 4.43 | 222 | 100 | 11.70 | 33.03 | 5.67 | 25.14 | 284 | 0.32 |
| 195 | 8.94 | 33.87 | 3.55 | 176 | 150 | 10.00 | 33.49 | 4.42 | 25.79 | 221 | 0.45 |
| | | | | | 200 | 8.89 | 33.89 | 3.49 | 26.29 | 174 | 0.55 |
| 286 | 8.00 | 34.11 | 2.15 | 145 | 250 | 8.35 | 34.05 | 2.75 | 26.50 | 154 | 0.63 |
| 383 | 6.92 | 34.18 | 0.99 | 125 | 300 | 7.83 | 34.13 | 1.89 | 26.64 | 141 | 0.71 |
| 473 | 6.16 | 34.22 | 0.63 | 113 | 400 | 6.75 | 34.19 | 0.90 | 26.84 | 122 | 0.85 |
| 570 | 5.60 | 34.25 | 0.42 | 104 | 500 | 6.00 | 34.23 | 0.57 | 26.97 | 110 | 0.97 |
| 761 | 4.78 | 34.36 | 0.36 | 86 | 600 | 5.44 | 34.26 | 0.40 | 27.06 | 101 | 1.08 |
| 952 | 4.14 | 34.42 | 0.54 | 75 | 700 | 5.01 | 34.32 | 0.36 | 27.16 | 92 | 1.19 |
| 1153 | 3.59 | 34.52 | 0.80 | 62 | 800 | 4.66 | 34.38 | 0.39 | 27.24 | 84 | 1.28 |
| | | | | | 1000 | 4.01 | 34.44 | 0.60 | 27.36 | 72 | 1.45 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

102.32 BLACK DOUGLAS; February 25, 1952; 2220 GCT;[a] 31°13'N, 116°41'W; sounding, 173 fm; wind, missing; weather, missing; sea, missing; wire angle, 03°.

| | | | | |
|---|---|---|---|---|
| 0 | 14.32 | 33.28 | | 314 |
| 10 | 13.61 | 33.30 | | 299 |
| 20 | 12.95 | 33.24 | | 291 |
| 30 | 12.11 | 33.24 | | 275 |
| 49 | 11.20 | 33.39 | | 248 |
| 68 | 10.19 | 33.49 | | 224 |
| 87 | 10.12 | 33.73 | | 205 |
| 105 | 9.84 | 33.91 | | 187 |
| 115 | 9.78 | 33.98 | | 181 |
| 129 | 9.54 | 34.04 | | 173 |
| 134 | 9.54 | 34.04 | | 173 |

105.32 HORIZON; February 6, 1952; 1321 GCT; 30°43.5'N, 116°20'W; sounding, 60 fm; wind, 200°, force 1; weather, clear; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.31 | 33.41 | 6.02 | 305 | 0 | 14.31 | 33.41 | 6.02 | 24.91 | 305 | 0.00 |
| 20 | 13.99 | 33.44 | 5.92 | 296 | 10 | 14.13 | 33.42 | 5.95 | 24.96 | 300 | 0.03 |
| 30 | 13.85 | 33.42 | 5.94 | 295 | 20 | 13.99 | 33.44 | 5.92 | 25.00 | 296 | 0.06 |
| 40 | 13.70 | 33.42 | 5.84 | 292 | 30 | 13.85 | 33.42 | 5.94 | 25.02 | 295 | 0.09 |
| 50 | 12.29 | 33.37 | 4.83 | 269 | 50 | 12.29 | 33.37 | 4.83 | 25.29 | 269 | 0.15 |

105.35 HORIZON; February 6, 1952; 1611 GCT; 30°38'N, 116°33'W; sounding, 820 fm; wind, 090°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.42 | 5.84 | | 0 | 15.0 | 33.42 | 5.84 | 24.78 | 318 | 0.00 |
| 15 | 14.89 | 33.44 | 5.83 | 314 | 10 | 14.9 | 33.44 | 5.83 | 24.81 | 315 | 0.03 |
| 40 | - | 33.44 | 5.83 | | 20 | 14.8 | 33.44 | 5.83 | 24.83 | 312 | 0.06 |
| 66 | - | 33.35 | 5.27 | | 30 | 14.8 | 33.44 | 5.83 | 24.83 | 312 | 0.09 |
| 90 | - | 33.44 | 4.33 | | 50 | 14.7 | 33.42 | 5.74 | 24.84 | 312 | 0.16 |
| 143 | 9.69 | 33.78 | 3.24 | 195 | 75 | 12.3 | 33.36 | 4.85 | 25.28 | 270 | 0.23 |
| 190 | 8.90 | 34.04 | 2.45 | 163 | 100 | 10.4 | 33.50 | 4.10 | 25.73 | 227 | 0.29 |
| 238 | 8.24 | - | - | | 150 | 9.57 | 33.83 | 3.09 | 26.13 | 189 | 0.40 |
| 284 | 7.88 | 34.14 | 1.62 | 141 | 200 | 8.73 | 34.05 | 2.35 | 26.44 | 160 | 0.49 |
| 383 | 7.06 | 34.25 | 0.71 | 122 | 250 | 8.13 | 34.10 | 1.93 | 26.57 | 148 | 0.57 |
| 478 | 6.12 | 34.40u | 0.49 | | 300 | 7.74 | 34.16 | 1.43 | 26.67 | 138 | 0.64 |
| 576 | 5.67 | 34.33 | 0.29 | 98 | 400 | 6.88 | 34.28 | 0.63 | 26.89 | 117 | 0.77 |
| 770 | 4.77 | 34.41 | 0.42u | 82 | 500 | 6.01 | | 0.44 | | | |
| 963 | 4.09 | 34.49 | 0.56 | 69 | 600 | 5.56 | | | | | |
| 1165 | 3.63 | 34.52 | 0.74 | 63 | 700 | 5.09 | | | | | |
| | | | | | 800 | 4.66 | | | | | |
| | | | | | 1000 | 3.98 | | | | | |

105.40 HORIZON; February 6, 1952; 2010 GCT; 30°30'N, 116°54'W; sounding, 750 fm; wind, 170°, force 2; weather, partly cloudy; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.46 | 5.86 | | 0 | 15.6 | 33.46 | 5.86 | 24.67 | 328 | 0.00 |
| 10 | 15.01 | 33.48 | 5.85 | 314 | 10 | 15.01 | 33.48 | 5.85 | 24.82 | 314 | 0.03 |
| 25 | - | 33.46 | 5.83 | | 20 | 14.9 | 33.47 | 5.83 | 24.84 | 312 | 0.06 |
| 50 | - | 33.43 | 5.65 | | 30 | 14.9 | 33.45 | 5.81 | 24.82 | 314 | 0.09 |
| 74 | - | 33.37 | 4.67 | | 50 | 14.7 | 33.43 | 5.65 | 24.85 | 311 | 0.16 |
| 98 | 10.74 | 33.55 | 4.12 | 229 | 75 | 11.7 | 33.37 | 4.65 | 25.40 | 259 | 0.23 |
| 149 | 9.32 | 33.89 | 2.94 | 181 | 100 | 10.60 | 33.57 | 4.07 | 25.75 | 225 | 0.29 |
| 196 | 8.65 | - | - | | 150 | 9.30 | 33.89 | 2.94 | 26.22 | 180 | 0.39 |
| 287 | 8.27 | 34.20 | 1.22 | 142 | 200 | 8.62 | 34.01 | 2.67 | 26.42 | 161 | 0.48 |
| 382 | 7.08 | 34.25 | 0.65 | 122 | 250 | 8.43 | 34.15 | 1.75 | 26.56 | 148 | 0.56 |
| 474 | 6.41 | 34.27 | 0.42 | 112 | 300 | 8.14 | 34.21 | 1.09 | 26.65 | 140 | 0.63 |
| 571 | 5.70 | 34.34 | 0.27 | 98 | 400 | 6.94 | 34.26 | 0.62 | 26.87 | 119 | 0.77 |
| 764 | 4.76 | 34.38 | 0.34 | 85 | 500 | 6.22 | 34.28 | 0.37 | 26.98 | 109 | 0.89 |
| 954 | 4.10 | 34.45 | 0.51 | 73 | 600 | 5.52 | 34.36 | 0.27 | 27.13 | 95 | 1.00 |
| 1156 | 3.69 | 34.51 | 0.70 | 64 | 700 | 5.01 | 34.38 | 0.30 | 27.20 | 87 | 1.10 |
| | | | | | 800 | 4.61 | 34.39 | 0.37 | 27.26 | 82 | 1.19 |
| | | | | | 1000 | 3.99 | 34.46 | 0.55 | 27.38 | 71 | 1.36 |

a) Bathythermograph calibration cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| HORIZON; February 7, 1952; 0157 GCT; 30°06.5'N, 117°32'W; sounding, 850 fm; wind, 290°, force 2; weather, partly cloudy; sea, indistinguishable; wire angle, 10°. | | | | | | | | | | | 105.50 |
| 0 | - | 33.44 | 5.76 | | 0 | 15.9 | 33.44 | 5.76 | 24.59 | 336 | 0.00 |
| 10 | 15.67 | 33.51 | 5.74 | 326 | 10 | 15.67 | 33.51 | 5.74 | 24.70 | 326 | 0.03 |
| 25 | - | 33.44 | 5.79 | | 20 | 15.5 | 33.46 | 5.76 | 24.70 | 326 | 0.07 |
| 50 | - | 33.45 | 5.74 | | 30 | 15.5 | 33.44 | 5.79 | 24.68 | 327 | 0.10 |
| 74 | - | 33.35 | 5.79 | | 50 | 15.5 | 33.45 | 5.74 | 24.69 | 326 | 0.16 |
| 98 | 13.06 | 33.35 | 5.27 | 285 | 75 | 14.9 | 33.35 | 5.78 | 24.74 | 321 | 0.25 |
| 148 | 10.15 | 33.57 | - | 218 | 100 | 12.90 | 33.35 | | 25.16 | 282 | 0.32 |
| 193 | 9.10 | 33.87 | 3.19 | 179 | 150 | 10.09 | 33.58 | | 25.85 | 216 | 0.45 |
| 284 | 7.89 | 34.11 | - | 143 | 200 | 8.99 | 33.89 | | 26.27 | 176 | 0.55 |
| 377 | 7.33 | 34.22 | 0.80 | 128 | 250 | 8.23 | 34.04 | | 26.51 | 153 | 0.63 |
| 468 | 6.66 | 34.27 | 0.47 | 115 | 300 | 7.78 | 34.14 | | 26.65 | 140 | 0.71 |
| 563 | 5.95 | 34.33 | 0.32 | 102 | 400 | 7.18 | 34.24 | | 26.82 | 124 | 0.84 |
| 754 | 5.00 | 34.38 | 0.35 | 87 | 500 | 6.39 | 34.29 | 0.39 | 26.96 | 110 | 0.97 |
| 942 | 4.24 | 34.43 | 0.54 | 75 | 600 | 5.73 | 34.34 | 0.31 | 27.09 | 98 | 1.08 |
| 1143 | 3.69 | 34.49 | 0.73 | 66 | 700 | 5.24 | 34.36 | 0.32 | 27.16 | 91 | 1.18 |
| | | | | | 800 | 4.80 | 34.39 | 0.40 | 27.24 | 84 | 1.28 |
| | | | | | 1000 | 4.06 | 34.44 | 0.60 | 27.36 | 73 | 1.45 |
| HORIZON; February 7, 1952; 0740 GCT; 29°48'N, 118°14.5'W; sounding, 1900 fm; wind, 260°, force 1; weather, cloudy; sea, slight; wire angle, 08°. | | | | | | | | | | | 105.60 |
| 0 | - | 33.44 | 5.73 | | 0 | 16.1 | 33.44 | 5.73 | 24.55 | 340 | 0.00 |
| 10 | 15.70 | 33.46 | 5.76 | 330 | 10 | 15.70 | 33.46 | 5.76 | 24.65 | 330 | 0.03 |
| 25 | - | 33.46 | 5.77 | | 20 | 15.6 | 33.46 | 5.76 | 24.67 | 328 | 0.07 |
| 50 | - | 33.46 | 5.79 | | 30 | 15.6 | 33.46 | 5.78 | 24.67 | 328 | 0.10 |
| 73 | - | 33.46 | 5.79 | | 50 | 15.6 | 33.46 | 5.79 | 24.67 | 328 | 0.17 |
| 97 | 13.78 | 33.40 | 5.32 | 295 | 75 | 15.6 | 33.46 | 5.77 | 24.67 | 328 | 0.25 |
| 149 | 10.97 | 33.75 | - | 218 | 100 | 13.60 | 33.40 | 5.21 | 25.05 | 292 | 0.33 |
| 194 | 10.69 | 34.16 | 1.70 | 183 | 150 | 10.96 | 33.76 | 3.10 | 25.84 | 217 | 0.45 |
| 285 | 9.43 | 34.29 | 1.15 | 153 | 200 | 10.63 | 34.18 | 1.63 | 26.22 | 180 | 0.56 |
| 382 | 8.28 | 34.33 | 0.72 | 133 | 250 | 9.94 | 34.26 | 1.32 | 26.40 | 163 | 0.64 |
| 473 | 7.17 | 34.31 | 0.48 | 119 | 300 | 9.26 | 34.30 | 1.08 | 26.55 | 149 | 0.72 |
| 570 | 6.20 | 34.33 | 0.31 | 105 | 400 | 8.05 | 34.33 | 0.69 | 26.76 | 129 | 0.87 |
| 762 | 4.97 | 34.40 | 0.34 | 85 | 500 | 6.89 | 34.31 | 0.42 | 26.91 | 115 | 1.00 |
| 954 | 4.18 | 34.45 | 0.54 | 73 | 600 | 5.94 | 34.34 | 0.31 | 27.06 | 101 | 1.12 |
| 1158 | 3.60 | 34.49 | 0.77 | 65 | 700 | 5.29 | 34.38 | 0.33 | 27.17 | 90 | 1.22 |
| | | | | | 800 | 4.78 | 34.41 | 0.38 | 27.25 | 83 | 1.31 |
| | | | | | 1000 | 4.01 | 34.46 | 0.60 | 27.38 | 71 | 1.48 |
| HORIZON; February 7, 1952; 1336 GCT; 29°26.5'N, 119°07'W; sounding, 1950 fm; wind, 200°, force 1; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | | 105.70 |
| 0 | - | 33.44 | 5.67 | | 0 | 15.8 | 33.44 | 5.67 | 24.61 | 333 | 0.00 |
| 10 | 15.66 | 33.46 | 5.59 | 329 | 10 | 15.66 | 33.46 | 5.59 | 24.66 | 329 | 0.03 |
| 25 | - | 33.42 | 5.60 | | 20 | 15.6 | 33.44 | 5.59 | 24.66 | 329 | 0.07 |
| 50 | - | 33.37 | 5.66 | | 30 | 15.4 | 33.41 | 5.62 | 24.68 | 327 | 0.10 |
| 75 | - | 33.39 | 5.69 | | 50 | 15.3 | 33.37 | 5.66 | 24.67 | 328 | 0.16 |
| 99 | 13.18 | 33.21 | 5.55 | 297 | 75 | 15.1 | 33.39 | 5.69 | 24.73 | 322 | 0.25 |
| 150 | 9.68 | 33.50 | 4.07 | 215 | 100 | 12.90 | 33.21 | 5.50 | 25.05 | 292 | 0.32 |
| 196 | 9.12 | 33.86 | 3.49 | 180 | 150 | 9.68 | 33.50 | 4.07 | 25.86 | 215 | 0.45 |
| 289 | 7.72 | 34.02 | 2.36 | 148 | 200 | 9.07 | 33.87 | 3.45 | 26.24 | 178 | 0.55 |
| 386 | 7.10 | 34.21 | 0.81 | 125 | 250 | 8.19 | 33.97 | 2.90 | 26.46 | 158 | 0.64 |
| 480 | 6.44 | 34.29 | 0.43 | 111 | 300 | 7.63 | 34.04 | 2.17 | 26.60 | 145 | 0.72 |
| 577 | 5.84 | 34.34 | 0.27 | 100 | 400 | 6.99 | 34.23 | 0.73 | 26.84 | 122 | 0.86 |
| 770 | 4.76 | 34.40 | 0.38 | 83 | 500 | 6.32 | 34.30 | 0.39 | 26.98 | 109 | 0.98 |
| 963 | 4.08 | 34.45 | 0.58 | 72 | 600 | 5.70 | 34.35 | 0.27 | 27.10 | 97 | 1.09 |
| 1164 | 3.52 | 34.51 | 0.81 | 62 | 700 | 5.12 | 34.38 | 0.31 | 27.19 | 88 | 1.19 |
| | | | | | 800 | 4.63 | 34.41 | 0.41 | 27.27 | 81 | 1.28 |
| | | | | | 1000 | 3.97 | 34.46 | 0.62 | 27.38 | 70 | 1.45 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

105.80 HORIZON; February 7, 1952; 1752 GCT;[a] 29°05'N, 119°37'W; sounding, 2150 fm; wind, 260°, force 2; weather, overcast; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.1 | 33.51 | 5.68 | 335 | | | | | | | |
| 10 | 15.96 | 33.51 | 5.70 | 332 | | | | | | | |
| 20 | 16.0 | 33.58 | 5.67 | 327 | | | | | | | |
| 30 | 16.1 | 33.62 | 5.61 | 327 | | | | | | | |
| 49 | 15.9 | 33.55 | 5.70 | 328 | | | | | | | |
| 67 | 15.80 | 33.49 | 5.69 | 330 | | | | | | | |
| 85 | 15.79 | 33.48 | 5.71 | 330 | | | | | | | |
| 104 | 13.52 | 33.27 | 5.68 | 300 | | | | | | | |
| 112 | 12.70 | 33.25 | 5.50 | 285 | | | | | | | |
| 122 | 12.10 | 33.30 | 5.20 | 271 | | | | | | | |
| 126 | 11.52 | 33.30 | 5.09 | 261 | | | | | | | |
| 131 | 11.05 | 33.28 | 5.00 | 254 | | | | | | | |
| 186 | 9.09 | 33.78 | 3.62 | 185 | | | | | | | |
| 234 | 8.30 | 34.00 | 3.01 | 157 | | | | | | | |
| 285 | 8.05 | 34.11 | 2.68 | 146 | | | | | | | |

105.80 HORIZON; February 7, 1952; 1934 GCT; 29°05'N, 119°37'W; sounding, 2200 fm; wind, 270°, force 2; weather, cloudy; sea, slight; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - b) | 33.60 | 5.62 | | 0 | (16.30) | 33.60 | 5.62 | (24.62) | (333) | (0.00) |
| 10 | 16.27 | 33.60 | 5.54 | 332 | 10 | 16.27 | 33.60 | 5.54 | 24.63 | 332 | 0.03 |
| 25 | - | 33.61 | 5.55 | | 20 | (16.20) | 33.61 | 5.55 | (24.65) | (330) | (0.07) |
| 50 | - | 33.52 | 5.59 | | 30 | (16.20) | 33.61 | 5.56 | (24.65) | (330) | (0.10) |
| 74 | - | 33.48 | 5.62 | | 50 | (15.80) | 33.52 | 5.59 | (24.68) | (328) | (0.17) |
| 98 | 13.87 | 33.30 | 5.63 | 304 | 75 | (15.60) | 33.48 | 5.63 | (24.69) | (326) | (0.25) |
| 151 | 9.59 | 33.55 | 4.09 | 210 | 100 | 13.60 | 33.30 | 5.57 | 24.98 | 299 | (0.33) |
| 197 | 8.88 | 33.86 | 3.43 | 176 | 150 | 9.67 | 33.53 | 4.11 | 25.88 | 213 | (0.46) |
| 288 | 7.96 | 34.13 | 1.60 | 143 | 200 | 8.82 | 33.89 | 3.35 | 26.30 | 173 | (0.55) |
| 386 | 7.06 | 34.18 | 0.82 | 127 | 250 | 8.30 | 34.06 | 2.19 | 26.51 | 153 | (0.64) |
| 478 | 6.36 | 34.28 | 0.35 | 111 | 300 | 7.84 | 34.14 | 1.50 | 26.64 | 141 | (0.71) |
| 576 | 5.84 | 34.36 | 0.27 | 98 | 400 | 6.94 | 34.19 | 0.73 | 26.81 | 125 | (0.85) |
| 768 | 4.74 | 34.36 | 0.32 | 86 | 500 | 6.23 | 34.31 | 0.22 | 27.00 | 107 | (0.97) |
| 960 | 4.09 | 34.43 | 0.53 | 74 | 600 | 5.69 | 34.36 | 0.27 | 27.11 | 96 | (1.08) |
| 1162 | 3.56 | 34.47 | 0.76 | 66 | 700 | 5.08 | 34.36 | 0.30 | 27.18 | 90 | (1.18) |
| | | | | | 800 | 4.62 | 34.37 | 0.35 | 27.24 | 84 | (1.28) |
| | | | | | 1000 | 3.98 | 34.44 | 0.57 | 27.36 | 72 | (1.45) |

110.33 CREST; February 6, 1952; 2018 GCT; 29°51'N, 115°53'W; sounding, 60 fm; wind, 150°, force 2; weather, partly cloudy; sea, rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.25 | 33.39 | 5.77 | 325 | 0 | 15.25 | 33.39 | 5.77 | 24.70 | 325 | 0.00 |
| 10 | 14.80 | 33.42 | 5.82 | 314 | 10 | 14.80 | 33.42 | 5.82 | 24.82 | 314 | 0.03 |
| 20 | 14.71 | 33.48 | 5.84 | 308 | 20 | 14.71 | 33.48 | 5.84 | 24.88 | 308 | 0.06 |
| 30 | 14.46 | 33.42 | 5.80 | 307 | 30 | 14.46 | 33.42 | 5.80 | 24.89 | 307 | 0.09 |
| 50 | 14.18 | 33.42 | 5.66 | 301 | 50 | 14.18 | 33.42 | 5.66 | 24.95 | 301 | 0.15 |
| 75 | 12.64 | 33.39 | 5.07 | 274 | 75 | 12.64 | 33.39 | 5.07 | 25.24 | 274 | 0.23 |

a) Bathythermograph calibration cast.

b) The bathythermograph slide for this station was missing. The temperature values were interpolated from a curve based on the values from the slide of the bathythermograph calibration cast made at this station two hours previously.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| CREST; February 6, 1952; 2132 GCT; 29°48'N, 115°59'W; sounding, 650 fm; wind, 150°, force 2; weather, partly cloudy; sea, rough; wire angle, 13°. | | | | | | | | | | | 110.35 |
| 0 | - | 33.42 | 5.79 | | 0 | 15.7 | 33.42 | 5.79 | 24.62 | 333 | 0.00 |
| 10 | 15.12 | 33.39 | 5.86 | 323 | 10 | 15.12 | 33.39 | 5.86 | 24.73 | 323 | 0.03 |
| 25 | - | 33.46 | 5.86 | | 20 | 15.0 | 33.46 | 5.86 | 24.81 | 315 | 0.06 |
| 49 | - | 33.40 | 5.75 | | 30 | 15.0 | 33.46 | 5.85 | 24.81 | 315 | 0.10 |
| 73 | - | 33.35 | 5.27 | | 50 | 14.1 | 33.40 | 5.74 | 24.95 | 301 | 0.16 |
| 96 | 10.93 | 33.43 | 4.54 | 241 | 75 | 12.0 | 33.35 | 5.25 | 25.33 | 265 | 0.23 |
| 146 | 9.75 | 33.84 | 3.34 | 191 | 100 | 10.70 | 33.46 | 4.39 | 25.65 | 235 | 0.29 |
| 191 | 9.58 | 34.14 | 2.25 | 166 | 150 | 9.70 | 33.88 | 3.28 | 26.15 | 187 | 0.40 |
| 281 | 8.89 | 34.36 | 0.97 | 139 | 200 | 9.51 | 34.18 | 2.08 | 26.41 | 162 | 0.49 |
| 375 | 7.68 | 34.36 | 0.56 | 122 | 250 | 9.18 | 34.34 | 1.28 | 26.59 | 145 | 0.57 |
| 465 | 6.88 | 34.36 | 0.34 | 111 | 300 | 8.65 | 34.36 | 0.85 | 26.69 | 136 | 0.64 |
| 560 | 6.15 | 34.33 | 0.24 | 104 | 400 | 7.43 | 34.36 | 0.49 | 26.88 | 118 | 0.77 |
| 653 | 5.44 | - | 0.23 | | 500 | 6.60 | 34.35 | 0.29 | 26.98 | 108 | 0.89 |
| 751 | 5.06 | 34.40 | 0.32 | 86 | 600 | 5.82 | 34.34 | 0.26 | 27.08 | 100 | 1.01 |
| 945 | 4.15 | 34.49 | 0.50 | 70 | 700 | 5.23 | 34.38 | 0.27 | 27.18 | 90 | 1.11 |
| | | | | | 800 | 4.82 | 34.42 | 0.37 | 27.26 | 82 | 1.20 |
| | | | | | 1000 | (3.95) | (34.51) | | (27.42) | (67) | (1.37) |
| CREST; February 7, 1952; 0114 GCT; 29°36.5'N, 116°20'W; sounding, 1400 fm; wind, 340°, force 2; weather, partly cloudy; sea, moderate; wire angle, 04°. | | | | | | | | | | | 110.40 |
| 0 | - | 33.48 | 5.88 | | 0 | 16.3 | 33.48 | 5.88 | 24.53 | 341 | 0.00 |
| 10 | 15.65 | 33.48 | 6.06 | 327 | 10 | 15.65 | 33.48 | 6.06 | 24.68 | 327 | 0.03 |
| 25 | - | 33.51 | 5.74 | | 20 | 15.6 | 33.50 | 5.80 | 24.70 | 325 | 0.07 |
| 50 | - | 33.48 | 5.78 | | 30 | 15.6 | 33.51 | 5.75 | 24.71 | 324 | 0.10 |
| 75 | - | 33.46 | 5.59 | | 50 | 15.4 | 33.48 | 5.78 | 24.73 | 322 | 0.16 |
| 100 | 12.24 | 33.30 | 5.29 | 273 | 75 | 15.2 | 33.46 | 5.59 | 24.76 | 319 | 0.24 |
| 154 | 9.77 | 33.60 | 4.11 | 209 | 100 | 12.24 | 33.30 | 5.29 | 25.25 | 273 | 0.32 |
| 201 | 9.08 | 34.02 | 2.88 | 167 | 150 | 9.90 | 33.56 | 4.23 | 25.87 | 214 | 0.44 |
| 294 | 8.56 | 34.31 | 1.34 | 138 | 200 | 9.09 | 34.02 | 2.90 | 26.36 | 168 | 0.54 |
| 391 | 7.40 | 34.29 | 0.80 | 123 | 250 | 8.85 | 34.26 | 1.88 | 26.58 | 146 | 0.62 |
| 484 | 6.44 | 34.29 | 0.44 | 111 | 300 | 8.50 | 34.31 | 1.30 | 26.68 | 137 | 0.69 |
| 581 | 5.78 | 34.33 | 0.36 | 100 | 400 | 7.28 | 34.29 | 0.75 | 26.84 | 122 | 0.83 |
| 772 | 4.90 | 34.45 | 0.53 | 81 | 500 | 6.30 | 34.29 | 0.40 | 26.97 | 109 | 0.95 |
| 963 | 4.10 | 34.50 | 0.54 | 69 | 600 | 5.68 | 34.34 | 0.38 | 27.09 | 98 | 1.06 |
| 1163 | 3.54 | 34.60 | 0.77 | 56 | 700 | 5.22 | 34.41 | 0.50 | 27.20 | 87 | 1.16 |
| | | | | | 800 | 4.80 | 34.46 | 0.53 | 27.29 | 79 | 1.25 |
| | | | | | 1000 | 3.96 | 34.51 | 0.55 | 27.42 | 67 | 1.42 |
| CREST; February 7, 1952; 0645 GCT; 29°16'N, 116°59'W; sounding, 1800 fm; wind, 340°, force 2; weather, partly cloudy; sea, very rough; wire angle, 07°. | | | | | | | | | | | 110.50 |
| 0 | - | 33.51 | 5.60 | | 0 | 16.1 | 33.51 | 5.60 | 24.60 | 335 | 0.00 |
| 10 | 15.91 | 33.51 | 5.63 | 331 | 10 | 15.91 | 33.51 | 5.63 | 24.64 | 331 | 0.03 |
| 25 | - | 33.51 | 5.65 | | 20 | 15.8 | 33.51 | 5.65 | 24.67 | 328 | 0.07 |
| 49 | - | 33.53 | 5.64 | | 30 | 15.7 | 33.51 | 5.65 | 24.69 | 326 | 0.10 |
| 73 | - | 33.51 | 5.52 | | 50 | 15.7 | 33.53 | 5.65 | 24.71 | 325 | 0.16 |
| 97 | 13.54 | 33.39 | 5.18 | 291 | 75 | 15.6 | 33.51 | 5.50 | 24.71 | 324 | 0.25 |
| 148 | 10.62 | 33.80 | 3.23 | 208 | 100 | 13.50 | 33.39 | 4.98 | 25.07 | 290 | 0.32 |
| 195 | 9.80 | 34.04 | 2.37 | 177 | 150 | 10.60 | 33.82 | 3.20 | 25.95 | 206 | 0.45 |
| 289 | 8.37 | 34.20 | 1.59 | 144 | 200 | 9.70 | 34.05 | 2.30 | 26.28 | 175 | 0.55 |
| 387 | 7.72 | 34.31 | 0.64 | 126 | 250 | 8.80 | 34.14 | 1.90 | 26.50 | 154 | 0.63 |
| 480 | 6.78 | 34.33 | 0.33 | 112 | 300 | 8.30 | 34.22 | 1.48 | 26.64 | 141 | 0.71 |
| 578 | 5.78 | 34.36 | 0.33 | 98 | 400 | 7.60 | 34.32 | 0.58 | 26.82 | 124 | 0.85 |
| 772 | 4.84 | 34.52u | 0.32 | | 500 | 6.52 | 34.33 | 0.32 | 26.98 | 109 | 0.97 |
| 963 | 4.13 | 34.49 | 0.53 | 70 | 600 | 5.63 | 34.38 | 0.32 | 27.13 | 94 | 1.08 |
| 1165 | 3.64 | 34.51 | 0.73 | 64 | 700 | 5.12 | 34.43 | 0.32 | 27.23 | 85 | 1.17 |
| | | | | | 800 | 4.73 | 34.46 | 0.32 | 27.30 | 78 | 1.26 |
| | | | | | 1000 | 4.00 | 34.49 | 0.59 | 27.40 | 69 | 1.43 |

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| | OBSERVED | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 110.60 | CREST; February 7, 1952; 1202, 1220 GCT; 28°55.5'N, 117°40'W; sounding, 2050 fm; wind, 020°, force 2; weather, cloudy; sea, rough; wire angle, 07°, 08°. | | | | | | | | | | |
| 0 | - | 33.60 | 5.63 | | 0 | 16.3 | 33.60 | 5.63 | 24.62 | 333 | 0.00 |
| 10 | 16.12 | 33.57 | 5.51 | 331 | 10 | 16.12 | 33.57 | 5.51 | 24.64 | 331 | 0.03 |
| 25 | - | 33.60 | 5.65 | | 20 | 16.1 | 33.59 | 5.63 | 24.66 | 329 | 0.07 |
| | | | | | 30 | 16.0 | 33.62 | 5.65 | 24.71 | 325 | 0.10 |
| 51 | - | 33.64 | 5.65 | | 50 | 16.0 | 33.64 | 5.65 | 24.72 | 323 | 0.16 |
| 74 | - | 33.62 | 5.78 | | 75 | 16.0 | 33.62 | 5.78 | 24.71 | 325 | 0.25 |
| 97 | 16.07 | 33.71 | 5.56 | 319 | 100 | 15.20 | 33.71 | 5.50 | 24.95 | 301 | 0.32 |
| 148 | 11.71 | 33.71 | 3.69 | 234 | 150 | 11.61 | 33.71 | 3.55 | 25.68 | 232 | 0.46 |
| 193 | 10.37 | 33.98 | 2.51 | 191 | 200 | 10.10 | 33.99 | 2.48 | 26.17 | 186 | 0.57 |
| 286 | 8.10 | 34.14 | 2.15 | 144 | 250 | 8.72 | 34.09 | 2.31 | 26.47 | 157 | 0.65 |
| 384 | 7.28 | 34.25 | 0.97 | 125 | 300 | 7.92 | 34.16 | 2.00 | 26.65 | 140 | 0.73 |
| 478 | 6.60 | 34.34 | 0.43 | 109 | 400 | 7.18 | 34.26 | 0.83 | 26.83 | 123 | 0.87 |
| 577 | 5.51 | 34.49u | 0.39 | | 500 | 6.34 | 34.34 | 0.41 | 27.01 | 106 | 0.99 |
| 773 | 4.82 | 34.43 | 0.40 | 81 | 600 | 5.40 | 34.37 | 0.40 | 27.15 | 92 | 1.09 |
| 967 | 4.00 | 34.51 | 0.58 | 67 | 700 | 5.12 | 34.40 | 0.40 | 27.21 | 87 | 1.19 |
| 1166 | 3.53 | 34.52 | 0.97 | 62 | 800 | 4.69 | 34.43 | 0.40 | 27.28 | 80 | 1.28 |
| | | | | | 1000 | 3.90 | 34.51 | 0.68 | 27.43 | 66 | 1.45 |
| 110.70 | CREST; February 7, 1952; 1731 GCT; 28°36.5'N, 118°18'W; sounding, 1850 fm; wind, calm; weather, cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 33.57 | 5.60 | | 0 | 16.9 | 33.57 | 5.60 | 24.46 | 348 | 0.00 |
| 10 | 16.11 | 33.55 | 5.78 | 332 | 10 | 16.11 | 33.55 | 5.78 | 24.63 | 332 | 0.03 |
| 25 | - | 33.58 | 5.61 | | 20 | 16.0 | 33.58 | 5.65 | 24.68 | 327 | 0.07 |
| 49 | - | 33.51 | 5.64 | | 30 | 16.0 | 33.58 | 5.60 | 24.68 | 327 | 0.10 |
| 73 | - | 33.52 | 5.72 | | 50 | 15.7 | 33.51 | 5.65 | 24.69 | 326 | 0.17 |
| 97 | 13.84 | 33.40 | 5.65 | 296 | 75 | 15.5 | 33.52 | 5.71 | 24.74 | 321 | 0.25 |
| 149 | 10.29 | 33.51 | 4.32 | 224 | 100 | 13.50 | 33.40 | 5.60 | 25.07 | 290 | 0.32 |
| 196 | 9.40 | 33.87 | 3.15 | 184 | 150 | 10.29 | 33.52 | 4.30 | 25.77 | 224 | 0.45 |
| 293 | 7.80 | 34.07 | 2.33 | 145 | 200 | 9.30 | 33.88 | 3.10 | 26.21 | 181 | 0.56 |
| 394 | 6.86 | 34.20 | 0.99 | 123 | 250 | 8.40 | 33.99 | 2.69 | 26.44 | 160 | 0.64 |
| 489 | 6.20 | 34.23 | 0.61 | 112 | 300 | 7.70 | 34.08 | 2.23 | 26.62 | 143 | 0.72 |
| 589 | 5.60 | 34.33 | 0.37 | 98 | 400 | 6.80 | 34.20 | 0.96 | 26.84 | 122 | 0.86 |
| 787 | 4.62 | 34.42 | 0.35 | 80 | 500 | 6.12 | 34.24 | 0.58 | 26.96 | 111 | 0.98 |
| 978 | 4.02 | 34.42 | 0.63 | 74 | 600 | 5.52 | 34.34 | 0.37 | 27.11 | 96 | 1.09 |
| 1176 | 3.50 | 34.51 | 0.86 | 62 | 700 | 4.98 | 34.40 | 0.35 | 27.22 | 85 | 1.19 |
| | | | | | 800 | 4.58 | 34.42 | 0.35 | 27.28 | 80 | 1.28 |
| | | | | | 1000 | 3.95 | 34.42 | 0.66 | 27.35 | 73 | 1.45 |
| 110.80 | CREST; February 7, 1952; 2251 GCT; 28°17'N, 118°56'W; sounding, 2250 fm; wind, 290°, force 2; weather, cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | - | 33.66 | 5.63 | | 0 | 16.9 | 33.66 | 5.63 | 24.53 | 341 | 0.00 |
| 10 | 16.55 | 33.64 | 5.60 | 335 | 10 | 16.55 | 33.64 | 5.60 | 24.60 | 335 | 0.03 |
| 25 | - | 33.62 | 5.59 | | 20 | 16.4 | 33.62 | 5.59 | 24.62 | 333 | 0.07 |
| 50 | - | 33.69 | 5.55 | | 30 | 16.4 | 33.62 | 5.59 | 24.62 | 333 | 0.10 |
| 74 | - | 33.71 | 5.52 | | 50 | 16.3 | 33.69 | 5.55 | 24.69 | 326 | 0.17 |
| 98 | 16.34 | 33.68 | 5.60 | 328 | 75 | 16.3 | 33.71 | 5.52 | 24.71 | 324 | 0.25 |
| 151 | 11.86 | 33.66 | 4.27 | 240 | 100 | 16.20 | 33.68 | 5.60 | 24.71 | 325 | 0.33 |
| 196 | 9.28 | 33.77 | 3.58 | 189 | 150 | 11.95 | 33.66 | 4.30 | 25.58 | 242 | 0.47 |
| 289 | 7.90 | 34.05 | 2.37 | 148 | 200 | 9.15 | 33.78 | 3.50 | 26.16 | 186 | 0.58 |
| 388 | 6.88 | 34.16 | 1.27 | 126 | 250 | 8.35 | 33.97 | 2.88 | 26.43 | 160 | 0.67 |
| 484 | 6.16 | 34.23 | 0.56 | 112 | 300 | 7.78 | 34.06 | 2.23 | 26.59 | 146 | 0.75 |
| 582 | 5.38 | 34.27 | 0.39 | 100 | 400 | 6.78 | 34.17 | 1.15 | 26.82 | 124 | 0.89 |
| 776 | 4.68 | 34.40 | 0.38 | 82 | 500 | 6.03 | 34.24 | 0.50 | 26.97 | 110 | 1.01 |
| 967 | 4.08 | 34.47 | 0.59 | 71 | 600 | 5.30 | 34.28 | 0.38 | 27.09 | 98 | 1.12 |
| 1169 | 3.55 | 34.54 | 0.77 | 60 | 700 | 4.90 | 34.36 | 0.38 | 27.20 | 88 | 1.22 |
| | | | | | 800 | 4.60 | 34.42 | 0.40 | 27.28 | 80 | 1.32 |
| | | | | | 1000 | 3.98 | 34.48 | 0.64 | 27.40 | 69 | 1.48 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| CREST; February 8, 1952; 0425 GCT; 27°56.5'N, 119°36'W; sounding, 2250 fm; wind, 220°, force 3; weather, partly cloudy; sea, very rough; wire angle, 05°. | | | | | | | | | | | 110.90 |
| 0 | - | 33.62 | 5.56 | | 0 | 16.8 | 33.62 | 5.56 | 24.52 | 342 | 0.00 |
| 10 | 16.52 | 33.58 | 5.61 | 339 | 10 | 16.52 | 33.58 | 5.61 | 24.56 | 339 | 0.03 |
| 25 | - | 33.60 | 5.61 | | 20 | 16.4 | 33.60 | 5.61 | 24.60 | 335 | 0.07 |
| 50 | - | 33.57 | 5.65 | | 30 | 16.3 | 33.60 | 5.61 | 24.62 | 333 | 0.10 |
| 73 | - | 33.64 | 5.61 | | 50 | 16.1 | 33.57 | 5.65 | 24.65 | 330 | 0.17 |
| 97 | 16.74 | 33.86 | 5.38 | 323 | 75 | 16.3 | 33.82 | 5.60 | 24.79 | 316 | 0.25 |
| 149 | 12.04 | 33.86 | 2.94 | 229 | 100 | 16.00 | 33.86 | 5.30 | 24.89 | 307 | 0.33 |
| 194 | 10.90 | 34.11 | 1.92 | 190 | 150 | 12.00 | 33.86 | 2.90 | 25.72 | 228 | 0.46 |
| 287 | 8.85 | 34.23 | 1.50 | 148 | 200 | 10.78 | 34.13 | 1.88 | 26.16 | 187 | 0.57 |
| 386 | 7.30 | 34.20 | 1.07 | 129 | 250 | 9.68 | 34.22 | 1.60 | 26.42 | 162 | 0.66 |
| 480 | 6.59 | 34.25 | 0.56 | 116 | 300 | 8.60 | 34.22 | 1.45 | 26.59 | 145 | 0.74 |
| 579 | 5.86 | 34.31 | 0.38 | 102 | 400 | 7.16 | 34.21 | 0.99 | 26.80 | 126 | 0.88 |
| 775 | 4.86 | 34.38 | 0.32 | 86 | 500 | 6.45 | 34.26 | 0.50 | 26.93 | 113 | 1.01 |
| 966 | 4.15 | 34.47 | 0.57 | 72 | 600 | 5.70 | 34.32 | 0.37 | 27.07 | 100 | 1.12 |
| 1167 | 3.60 | 34.54 | 0.78 | 61 | 700 | 5.18 | 34.36 | 0.33 | 27.17 | 91 | 1.22 |
| | | | | | 800 | 4.78 | 34.39 | 0.33 | 27.24 | 84 | 1.32 |
| | | | | | 1000 | 4.02 | 34.48 | 0.64 | 27.39 | 69 | 1.49 |
| CREST; February 9, 1952; 1526 GCT; 29°22.5'N, 115°17.5'W; sounding, 30 fm; wind, 210°, force 4; weather, intermittent light drizzle; sea, rough; wire angle, 00°. | | | | | | | | | | | 113.30 |
| 0 | 15.66 | 33.66 | 5.76 | 314 | 0 | 15.66 | 33.66 | 5.76 | 24.81 | 314 | 0.00 |
| 10 | 15.68 | 33.68 | 5.75 | 313 | 10 | 15.68 | 33.68 | 5.75 | 24.83 | 313 | 0.03 |
| 20 | 15.70 | 33.66 | 5.76 | 315 | 20 | 15.70 | 33.66 | 5.76 | 24.81 | 315 | 0.06 |
| 30 | 15.63 | 33.68 | 5.71 | 312 | 30 | 15.63 | 33.68 | 5.71 | 24.84 | 312 | 0.09 |
| CREST; February 9, 1952; 1125 GCT; 29°12'N, 115°39'W; sounding, 900 fm; wind, 150°, force 4; weather, cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | | 113.35 |
| 0 | - | 33.42 | 5.39 | | 0 | 15.8 | 33.42 | 5.39 | 24.60 | 335 | 0.00 |
| 10 | 15.45 | 33.42 | 3.01u | 327 | 10 | 15.45 | 33.42 | | 24.68 | 327 | 0.03 |
| 25 | - | 33.40 | 5.73 | | 20 | 15.3 | 33.40 | | 24.69 | 326 | 0.07 |
| 50 | - | 33.48 | 5.85 | | 30 | 15.2 | 33.40 | 5.77 | 24.72 | 324 | 0.10 |
| 75 | - | 33.31 | 4.94 | | 50 | 14.7 | 33.48 | 5.85 | 24.89 | 308 | 0.16 |
| 100 | 11.49 | 33.70 | 3.48 | 231 | 75 | 12.0 | 33.31 | 4.94 | 25.30 | 268 | 0.23 |
| 155 | 10.21 | 33.95 | 2.69 | 190 | 100 | 11.49 | 33.70 | 3.48 | 25.70 | 231 | 0.30 |
| 203 | 9.42 | 34.07 | 2.30 | 169 | 150 | 10.33 | 33.93 | 2.74 | 26.08 | 194 | 0.40 |
| 298 | 8.75 | 34.33 | 0.92 | 140 | 200 | 9.48 | 34.06 | 2.33 | 26.33 | 171 | 0.50 |
| 397 | 7.75 | 34.40 | 0.48 | 120 | 250 | 9.09 | 34.22 | 1.62 | 26.51 | 153 | 0.58 |
| 491 | 6.76 | 34.37 | 0.33 | 109 | 300 | 8.72 | 34.34 | 0.90 | 26.67 | 138 | 0.66 |
| 590 | 6.04 | 34.38 | 0.27 | 99 | 400 | 7.70 | 34.40 | 0.48 | 26.87 | 119 | 0.79 |
| 784 | 4.92 | 34.42 | 0.33 | 83 | 500 | 6.68 | 34.37 | 0.33 | 26.99 | 108 | 0.91 |
| 977 | 4.32 | 34.47 | 0.52 | 73 | 600 | 5.98 | 34.38 | 0.27 | 27.09 | 98 | 1.02 |
| 1180 | 3.56 | 34.58 | 0.78 | 58 | 700 | 5.32 | 34.40 | 0.29 | 27.18 | 89 | 1.12 |
| | | | | | 800 | 4.87 | 34.42 | 0.33 | 27.25 | 83 | 1.22 |
| | | | | | 1000 | 4.13 | 34.48 | 0.57 | 27.38 | 71 | 1.39 |
| CREST; February 9, 1952; 0805 GCT; 29°05'N, 115°59.5'W; sounding, 900 fm; wind, 180°, force 4; weather, cloudy; sea, rough; wire angle, 01°. | | | | | | | | | | | 113.40 |
| 0 | - | 33.48 | 5.68 | | 0 | 15.9 | 33.48 | 5.68 | 24.62 | 333 | 0.00 |
| 10 | 15.65 | 33.46 | 5.68 | 329 | 10 | 15.65 | 33.46 | 5.68 | 24.66 | 329 | 0.03 |
| 25 | - | 33.46 | 5.76 | | 20 | 15.7 | 33.46 | 5.73 | 24.65 | 330 | 0.07 |
| 50 | - | 33.46 | 5.73 | | 30 | 15.5 | 33.46 | 5.76 | 24.70 | 326 | 0.10 |
| 75 | - | 33.46 | 5.67 | | 50 | 15.2 | 33.46 | 5.73 | 24.76 | 319 | 0.16 |
| 100 | 12.18 | 33.31 | 5.14 | 272 | 75 | 15.0 | 33.46 | 5.67 | 24.81 | 315 | 0.24 |
| 152 | 9.77 | 33.75 | 3.73 | 198 | 100 | 12.18 | 33.31 | 5.14 | 25.26 | 272 | 0.32 |
| 199 | 9.44 | 34.11 | 2.35 | 166 | 150 | 9.82 | 33.75 | 3.80 | 26.03 | 199 | 0.44 |
| 294 | 8.88 | - | 0.93 | | 200 | 9.43 | 34.12 | 2.35 | 26.38 | 165 | 0.53 |
| 395 | 7.76 | 34.34 | 0.59 | 125 | 250 | 9.18 | 34.27 | 1.40 | 26.54 | 150 | 0.61 |
| 489 | 6.85 | 34.36 | 0.38 | 111 | 300 | 8.80 | 34.32 | 0.90 | 26.64 | 141 | 0.69 |
| 588 | 5.92 | 34.36 | 0.28 | 99 | 400 | 7.70 | 34.34 | 0.58 | 26.82 | 124 | 0.82 |
| 787 | 4.79 | 34.42 | 0.38 | 82 | 500 | 6.74 | 34.36 | 0.37 | 26.97 | 109 | 0.95 |
| 979 | 4.02 | 34.51 | 0.62 | 67 | 600 | 5.82 | 34.36 | 0.28 | 27.09 | 98 | 1.06 |
| 1180 | 3.52 | 34.58 | 0.77 | 57 | 700 | 5.20 | 34.38 | 0.30 | 27.18 | 89 | 1.16 |
| | | | | | 800 | 4.72 | 34.42 | 0.40 | 27.27 | 81 | 1.25 |
| | | | | | 1000 | 3.94 | 34.52 | 0.65 | 27.43 | 66 | 1.42 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **113.50** | CREST; February 9, 1952; 0225, 0255 GCT; 28°43'N, 116°38'W; sounding, 1950 fm; wind, 170°, force 3; weather, cloudy; sea, rough; wire angle, 06°, 06°. | | | | | | | | | | |
| 0 | - | 33.55 | 5.41 | | 0 | 16.2 | 33.55 | 5.41 | 24.61 | 334 | 0.00 |
| 10 | 15.99 | 33.49 | 3.97u | 334 | 10 | 15.99 | 33.49 | | 24.61 | 334 | 0.03 |
| 25 | - | 33.53 | 5.68 | | 20 | 16.0 | 33.52 | | 24.63 | 332 | 0.07 |
| 50 | - | 33.53 | 5.69 | | 30 | 15.9 | 33.53 | 5.69 | 24.66 | 329 | 0.10 |
| | | | | | 50 | 15.8 | 33.53 | 5.69 | 24.68 | 327 | 0.17 |
| 74 | - | 33.53 | 5.63 | | 75 | 15.7 | 33.53 | 5.63 | 24.71 | 325 | 0.25 |
| 100 | 13.54 | 33.34 | 5.36 | 295 | 100 | 13.54 | 33.34 | 5.36 | 25.02 | 295 | 0.33 |
| 153 | 10.78 | 33.86 | 3.56 | 207 | 150 | 10.85 | 33.82 | 3.68 | 25.90 | 211 | 0.45 |
| 200 | 10.23 | 34.14 | 2.00 | 177 | 200 | 10.23 | 34.14 | 2.00 | 26.26 | 177 | 0.55 |
| 294 | 8.99 | 34.29 | 1.13 | 146 | 250 | 9.57 | 34.24 | 1.42 | 26.45 | 159 | 0.64 |
| 393 | 7.88 | 34.34 | 0.69 | 126 | 300 | 8.90 | 34.30 | 1.10 | 26.61 | 144 | 0.72 |
| 486 | 7.02 | - | 0.41 | | 400 | 7.80 | | 0.65 | | | |
| 584 | 6.11 | 34.38 | 0.32 | 100 | 500 | 6.89 | | 0.39 | | | |
| 777 | 4.93 | 34.42 | 0.34 | 83 | 600 | 5.99 | | 0.31 | | | |
| 969 | 4.23 | - | 0.50 | | 700 | 5.30 | | 0.32 | | | |
| 1173 | 3.62 | 34.52 | 0.73 | 63 | 800 | 4.84 | | 0.37 | | | |
| | | | | | 1000 | 4.12 | | 0.54 | | | |
| **113.60** | CREST; February 8, 1952; 2106 GCT; 28°23'N, 117°16.5'W; sounding, 2150 fm; wind, 200°, force 3; weather, cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | |
| 0 | - | 33.64 | 5.67 | | 0 | 16.5 | 33.64 | 5.67 | 24.61 | 334 | 0.00 |
| 10 | 16.20 | 33.60 | 5.69 | 330 | 10 | 16.20 | 33.60 | 5.69 | 24.65 | 330 | 0.03 |
| 24 | - | 33.62 | 5.69 | | 20 | 16.1 | 33.62 | 5.70 | 24.68 | 327 | 0.07 |
| 49 | - | 33.51 | 5.64 | | 30 | 16.0 | 33.62 | 5.68 | 24.71 | 325 | 0.10 |
| 73 | - | 33.47 | 5.61 | | 50 | 15.6 | 33.51 | 5.63 | 24.71 | 324 | 0.16 |
| 98 | 13.12 | 33.40 | 5.62 | 282 | 75 | 15.2 | 33.46 | 5.61 | 24.76 | 319 | 0.24 |
| 150 | 9.91 | 33.55 | 5.38 | 215 | 100 | 13.00 | 33.40 | 5.61 | 25.17 | 280 | 0.32 |
| 197 | 10.30 | 34.18 | 4.23 | 175 | 150 | 9.91 | 33.55 | 5.38 | 25.86 | 215 | 0.45 |
| 289 | 9.16 | 34.34 | 2.04 | 145 | 200 | 10.30 | 34.20 | 4.10 | 26.30 | 173 | 0.54 |
| 385 | 7.96 | 34.36 | 0.99 | 126 | 250 | 9.85 | 34.30 | 2.70 | 26.45 | 159 | 0.63 |
| 477 | 7.00 | 34.36 | 0.59 | 113 | 300 | 9.01 | 34.34 | 1.90 | 26.62 | 143 | 0.71 |
| 574 | 6.20 | 34.38 | 0.38 | 101 | 400 | 7.79 | 34.36 | 0.90 | 26.82 | 123 | 0.85 |
| 766 | 5.11 | 34.42 | 0.28 | 85 | 500 | 6.79 | 34.36 | 0.52 | 26.96 | 110 | 0.97 |
| 957 | 4.26 | - | 0.50 | | 600 | 6.02 | 34.38 | 0.36 | 27.08 | 99 | 1.08 |
| 1159 | 3.69 | 34.52 | 0.69 | 63 | 700 | 5.46 | 34.40 | 0.30 | 27.17 | 91 | 1.19 |
| | | | | | 800 | 4.93 | 34.43 | 0.30 | 27.25 | 83 | 1.28 |
| | | | | | 1000 | 4.10 | 34.49 | 0.56 | 27.39 | 70 | 1.45 |
| **113.70** | CREST; February 8, 1952; 1622 GCT; 28°06'N, 117°51'W; sounding, 2000 fm; wind, 200°, force 3; weather, overcast; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 33.55 | 5.66 | | 0 | 16.3 | 33.55 | 5.66 | 24.59 | 336 | 0.00 |
| 10 | 16.07 | 33.53 | 5.59 | 333 | 10 | 16.07 | 33.53 | 5.59 | 24.62 | 333 | 0.03 |
| 25 | - | 33.55 | 5.63 | | 20 | 16.0 | 33.54 | 5.62 | 24.65 | 330 | 0.07 |
| 50 | - | 33.58 | 5.59 | | 30 | 16.0 | 33.56 | 5.63 | 24.66 | 329 | 0.10 |
| 74 | - | 33.64 | 5.59 | | 50 | 16.0 | 33.58 | 5.59 | 24.68 | 327 | 0.17 |
| 98 | 16.00 | 33.64 | 5.58 | 323 | 75 | 16.0 | 33.64 | 5.59 | 24.72 | 323 | 0.25 |
| 152 | 11.32 | 33.42 | 4.73 | 248 | 100 | 15.90 | 33.64 | 5.58 | 24.75 | 321 | 0.33 |
| 198 | 9.61 | 33.80 | 3.48 | 192 | 150 | 11.48 | 33.42 | 4.80 | 25.48 | 251 | 0.47 |
| 294 | 8.20 | 34.10 | 2.00 | 149 | 200 | 9.57 | 33.81 | 3.41 | 26.12 | 191 | 0.59 |
| 395 | 7.19 | 34.29 | 0.75 | 120 | 250 | 8.65 | 33.98 | 2.68 | 26.40 | 164 | 0.68 |
| 490 | 6.72 | 34.36 | 0.32 | 109 | 300 | 7.98 | 34.12 | 1.90 | 26.61 | 144 | 0.76 |
| 588 | 5.88 | 34.36 | 0.29 | 99 | 400 | 7.15 | 34.30 | 0.71 | 26.87 | 119 | 0.89 |
| 787 | 4.91 | 34.43 | 0.32 | 82 | 500 | 6.62 | 34.36 | 0.32 | 26.99 | 108 | 1.01 |
| 980 | 4.19 | 34.47 | 0.52 | 72 | 600 | 5.78 | 34.36 | 0.30 | 27.10 | 98 | 1.12 |
| 1179 | 3.60 | - | 0.77 | | 700 | 5.26 | 34.39 | 0.30 | 27.18 | 89 | 1.22 |
| | | | | | 800 | 4.85 | 34.44 | 0.33 | 27.27 | 81 | 1.32 |
| | | | | | 1000 | 4.11 | (34.46) | 0.57 | (27.37) | (72) | (1.49) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; February 9, 1952; 2040 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 280°, force 3; weather, intermittent light drizzle; sea, moderate; wire angle, 02°. | | | | | | | | | | | 117.26 |
| 0 | 15.87 | 33.73 | 5.79 | 314 | 0 | 15.87 | 33.73 | 5.79 | 24.82 | 314 | 0.00 |
| 10 | 15.85 | 33.71 | 5.68 | 315 | 10 | 15.85 | 33.71 | 5.68 | 24.81 | 315 | 0.03 |
| 20 | 15.80 | 33.75 | 5.76 | 311 | 20 | 15.80 | 33.75 | 5.76 | 24.85 | 311 | 0.06 |
| 30 | 15.77 | 33.82 | 5.67 | 305 | 30 | 15.77 | 33.82 | 5.67 | 24.91 | 305 | 0.09 |
| 50 | 14.78 | 33.66 | 5.04 | 296 | 50 | 14.78 | 33.66 | 5.04 | 25.01 | 296 | 0.15 |
| CREST; February 9, 1952; 2232 GCT; 28°48'N, 114°56.5'W; sounding, 52 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 117.30 |
| 0 | 15.31 | 33.44 | 5.86 | 323 | 0 | 15.31 | 33.44 | 5.86 | 24.72 | 323 | 0.00 |
| 10 | 15.44 | 33.53 | 4.56u | 319 | 10 | 15.44 | 33.53 | | 24.76 | 319 | 0.03 |
| 20 | 15.62 | 33.71 | 5.83 | 310 | 20 | 15.62 | 33.71 | 5.83 | 24.86 | 310 | 0.06 |
| 30 | 15.47 | 33.64 | 5.80 | 312 | 30 | 15.47 | 33.64 | 5.80 | 24.84 | 312 | 0.09 |
| 50 | 13.81 | 33.62 | 3.89 | 279 | 50 | 13.81 | 33.62 | 3.89 | 25.18 | 279 | 0.15 |
| CREST; February 10, 1952; 0225 GCT; 28°38'N, 115°16'W; sounding, 111 fm; wind, 260°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 117.35 |
| 0 | 15.77 | 33.51 | 5.77 | 328 | 0 | 15.77 | 33.51 | 5.77 | 24.67 | 328 | 0.00 |
| 10 | 15.96 | 33.73 | 5.74 | 316 | 10 | 15.96 | 33.73 | 5.74 | 24.80 | 316 | 0.03 |
| 25 | 15.63 | 33.84 | 5.18 | 301 | 20 | 15.70 | 33.84 | 5.46 | 24.94 | 302 | 0.06 |
| 50 | 14.37 | 33.80 | 4.23 | 277 | 30 | 15.60 | 33.84 | 4.95 | 24.97 | 300 | 0.09 |
| 74 | 13.08 | - | 3.59 | | 50 | 14.37 | 33.80 | 4.23 | 25.20 | 277 | 0.15 |
| 98 | 11.95 | 33.87 | 2.90 | 226 | 75 | 13.00 | 33.80 | 3.58 | 25.48 | 251 | 0.22 |
| 120 | 11.38 | 33.98a) | 2.53 | 208 | 100 | 11.90 | 33.89 | 2.87 | 25.77 | 224 | 0.28 |
| 148 | 10.94 | 34.16 | 1.72 | 187 | 150 | (10.91) | (34.17) | (1.71) | (26.17) | (186) | (0.38) |
| CREST; February 10, 1952; 0600 GCT; 28°28'N, 115°35.5'W; sounding, 570 fm; wind, 250°, force 2; weather, missing; sea, moderate; wire angle, 04°. | | | | | | | | | | | 117.40 |
| 0 | - | 33.46 | - | | 0 | (15.50) | 33.46 | | (24.70) | (326) | (0.00) |
| 10 | 15.39 | 33.42 | - | 326 | 10 | 15.39 | 33.42 | | 24.69 | 326 | 0.03 |
| 25 | - | 33.46 | 5.74 | | 20 | (15.30) | 33.46 | | (24.74) | (321) | (0.07) |
| 51 | - | 33.40 | 5.84 | | 30 | (15.20) | 33.46 | 5.78 | (24.76) | (319) | (0.10) |
| 75 | - | 33.46 | 5.63 | | 50 | (14.90) | 33.40 | 5.83 | (24.78) | (317) | (0.16) |
| 101 | 13.51 | 33.75 | 3.94 | 264 | 75 | (14.00) | 33.46 | 5.63 | (25.02) | (295) | (0.24) |
| 155 | 10.90 | 34.11 | 2.13 | 190 | 100 | (13.50) | 33.75 | 4.10 | (25.34) | (264) | (0.31) |
| 202 | 10.56 | 34.36 | 1.12 | 166 | 150 | 11.00 | 34.08 | 2.30 | 26.08 | 194 | (0.42) |
| 297 | 9.32 | 34.40 | 0.75 | 143 | 200 | 10.60 | 34.36 | 1.16 | 26.37 | 167 | (0.52) |
| 400 | 8.48 | 34.45 | 0.44 | 127 | 250 | 9.88 | 34.40 | 0.87 | 26.52 | 152 | (0.60) |
| 496 | 6.85 | 34.32 | 0.38 | 114 | 300 | 9.29 | 34.40 | 0.72 | 26.62 | 143 | (0.67) |
| 597 | 5.94 | 34.36 | 0.38 | 99 | 400 | 8.48 | 34.45 | 0.44 | 26.79 | 127 | (0.82) |
| 693 | 5.44 | 34.39 | 0.30 | 91 | 500 | 6.79 | 34.32 | 0.38 | 26.93 | 113 | (0.94) |
| 797 | 4.88 | 34.43 | 0.37 | 82 | 600 | 5.90 | 34.36 | 0.37 | 27.08 | 99 | (1.06) |
| 894 | 4.55 | 34.38 | 0.48 | 82 | 700 | 5.40 | 34.40 | 0.30 | 27.17 | 90 | (1.16) |
| | | | | | 800 | 4.85 | 34.42 | 0.38 | 27.25 | 83 | (1.25) |

a) Loose bottle cap; value falls on property curve.

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 117.50 | CREST; February 10, 1952; 1136, 1348 GCT; 28°08'N, 116°15'W; sounding, 2400 fm; wind, 260°, force 1; weather, partly cloudy; sea, rough; wire angle, 02°, 08°. | | | | | | | | | | |
| 0 | - | 33.51 | 5.68 | | 0 | 15.3 | 33.51 | 5.68 | 24.78 | 318 | 0.00 |
| 10 | 15.40 | 33.49 | 5.68 | 321 | 10 | 15.40 | 33.49 | 5.68 | 24.74 | 321 | 0.03 |
| 25 | - | 33.51 | 5.74 | | 20 | 15.1 | 33.51 | 5.72 | 24.82 | 314 | 0.06 |
| 50 | - | 33.49 | 5.68 | | 30 | 14.9 | 33.51 | 5.75 | 24.87 | 309 | 0.09 |
| 74 | - | 33.39 | 5.02 | | 50 | 14.8 | 33.49 | 5.68 | 24.87 | 309 | 0.16 |
| 98 | 11.50 | 33.46 | 4.53 | 248 | 75 | 12.9 | 33.39 | 5.00 | 25.19 | 279 | 0.23 |
| 150 | 10.32 | 33.89 | 2.77 | 197 | 100 | 11.40 | 33.48 | 4.45 | 25.54 | 245 | 0.30 |
| 197 | 9.44 | 34.07 | 2.32 | 169 | 150 | 10.32 | 33.89 | 2.77 | 26.05 | 197 | 0.41 |
| | | | | | 200 | 9.40 | 34.08 | 2.29 | 26.35 | 168 | 0.50 |
| 292 | 8.66 | 34.27 | 1.29 | 143 | 250 | 9.00 | 34.21 | 1.74 | 26.52 | 152 | 0.58 |
| 389 | 7.38 | 34.29 | 0.63 | 123 | 300 | 8.58 | 34.28 | 1.23 | 26.64 | 141 | 0.66 |
| 484 | 6.61 | 34.33 | 0.38 | 110 | 400 | 7.27 | 34.29 | 0.60 | 26.84 | 122 | 0.80 |
| 582 | 5.89 | 34.31 | 0.30 | 103 | 500 | 6.50 | 34.33 | 0.35 | 26.98 | 109 | 0.92 |
| 774 | 4.87 | 34.42 | 0.35 | 83 | 600 | 5.80 | 34.31 | 0.30 | 27.05 | 102 | 1.03 |
| 964 | 4.18 | 34.47 | 0.55 | 72 | 700 | 5.20 | 34.36 | 0.32 | 27.17 | 91 | 1.14 |
| 1164 | 3.66 | 34.49 | 0.74 | 65 | 800 | 4.77 | 34.43 | 0.38 | 27.27 | 81 | 1.23 |
| | | | | | 1000 | 4.08 | 34.48 | 0.60 | 27.39 | 70 | 1.40 |
| 117.60 | CREST; February 10, 1952; 1906 GCT; 27°46.5'N, 116°56.5'W; sounding, 1950 fm; wind, 180°, force 1; weather, partly cloudy; sea, rough; wire angle, 06°. | | | | | | | | | | |
| 0 | - | 33.51 | 5.63 | | 0 | 16.3 | 33.51 | 5.63 | 24.55 | 339 | 0.00 |
| 10 | 15.98 | 33.48 | 5.64 | 334 | 10 | 15.98 | 33.48 | 5.64 | 24.60 | 334 | 0.03 |
| 25 | - | 33.51 | 5.66 | | 20 | 16.0 | 33.50 | 5.65 | 24.62 | 333 | 0.07 |
| 50 | - | 33.50 | 5.68 | | 30 | 15.9 | 33.51 | 5.65 | 24.65 | 330 | 0.10 |
| 75 | - | 33.51 | 5.64 | | 50 | 15.7 | 33.50 | 5.68 | 24.68 | 327 | 0.17 |
| 99 | 12.54 | 33.26 | 5.36 | 282 | 75 | 15.6 | 33.51 | 5.64 | 24.71 | 324 | 0.25 |
| 150 | 10.91 | 33.86 | 2.91 | 209 | 100 | 12.30 | 33.26 | 5.33 | 25.20 | 277 | 0.32 |
| 197 | 9.99 | 34.11 | 2.05 | 175 | 150 | 10.91 | 33.86 | 2.91 | 25.92 | 209 | 0.45 |
| 290 | 8.88 | 34.29 | 1.14 | 144 | 200 | 9.93 | 34.12 | 2.00 | 26.30 | 173 | 0.54 |
| 387 | 7.35 | 34.25 | 0.83 | 126 | 250 | 9.33 | 34.26 | 1.40 | 26.51 | 154 | 0.63 |
| 481 | 6.84 | 34.33 | 0.34 | 113 | 300 | 8.70 | 34.29 | 1.10 | 26.63 | 142 | 0.70 |
| 579 | 6.08 | 34.36 | 0.33 | 101 | 400 | 7.27 | 34.26 | 0.78 | 26.82 | 124 | 0.84 |
| 771 | 4.96 | 34.40 | 0.35 | 85 | 500 | 6.73 | 34.34 | 0.32 | 26.96 | 111 | 0.97 |
| 962 | 4.16 | 34.47 | 0.52 | 72 | 600 | 5.90 | 34.36 | 0.34 | 27.08 | 99 | 1.08 |
| 1164 | 3.68 | 34.51 | 0.70 | 64 | 700 | 5.32 | 34.38 | 0.34 | 27.17 | 91 | 1.18 |
| | | | | | 800 | 4.80 | 34.40 | 0.36 | 27.24 | 84 | 1.28 |
| | | | | | 1000 | 4.07 | 34.48 | 0.58 | 27.39 | 70 | 1.45 |
| 117.70 | CREST; February 11, 1952; 0014 GCT; 27°24'N, 117°32'W; sounding, 2280 fm; wind, 240°, force 2; weather, partly cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 33.82 | 5.58 | | 0 | 17.9 | 33.82 | 5.58 | 24.41 | 353 | 0.00 |
| 10 | 16.78 | 33.80 | 5.55 | 329 | 10 | 16.78 | 33.80 | 5.55 | 24.67 | 329 | 0.03 |
| 25 | - | 33.86 | 5.53 | | 20 | 16.9 | 33.86 | 5.53 | 24.68 | 327 | 0.07 |
| 50 | - | 33.86 | 5.52 | | 30 | 17.0 | 33.86 | 5.53 | 24.66 | 329 | 0.10 |
| 75 | - | 33.86 | 5.49 | | 50 | 16.9 | 33.86 | 5.52 | 24.68 | 327 | 0.17 |
| 99 | 12.98 | 33.46 | 4.56 | 275 | 75 | 16.6 | 33.86 | 5.49 | 24.75 | 320 | 0.25 |
| 151 | 10.21 | 33.80 | 3.12 | 202 | 100 | 12.90 | 33.46 | 4.50 | 25.24 | 274 | 0.32 |
| 199 | 9.30 | 34.02 | 2.00 | 171 | 150 | 10.27 | 33.80 | 3.18 | 25.99 | 203 | 0.44 |
| 293 | 8.99 | 34.40 | 0.82 | 138 | 200 | 9.30 | 34.02 | 2.00 | 26.32 | 171 | 0.54 |
| 392 | 7.69 | 34.33 | 0.49 | 124 | 250 | 9.11 | 34.32 | 1.23 | 26.59 | 146 | 0.62 |
| 486 | 6.72 | 34.29 | 0.38 | 114 | 300 | 8.93 | 34.40 | 0.79 | 26.68 | 137 | 0.69 |
| 586 | 5.96 | 34.31 | 0.31 | 103 | 400 | 7.60 | 34.32 | 0.47 | 26.82 | 124 | 0.83 |
| 780 | 5.10 | 34.38 | 0.33 | 88 | 500 | 6.60 | 34.29 | 0.37 | 26.94 | 113 | 0.95 |
| 968 | 4.18 | 34.45 | 0.53 | 73 | 600 | 5.90 | 34.31 | 0.30 | 27.04 | 103 | 1.07 |
| 1167 | 3.68 | 34.51 | 0.71 | 64 | 700 | 5.40 | 34.35 | 0.30 | 27.13 | 94 | 1.18 |
| | | | | | 800 | 5.00 | 34.38 | 0.35 | 27.21 | 87 | 1.27 |
| | | | | | 1000 | 4.10 | 34.46 | 0.58 | 27.37 | 72 | 1.45 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

CREST; February 13, 1952; 0443 GCT; 28°23'N, 114°14'W; sounding, 30 fm; wind, 320°, force 6; weather, missing; sea, very rough; wire angle, 05°. 120.25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.87 | 33.71 | 5.64 | 315 | 0 | 15.87 | 33.71 | 5.64 | 24.81 | 315 | 0.00 |
| 10 | 15.90 | 33.64u | 5.72 | | 10 | 15.90 | 33.72 | 5.72 | 24.81 | 315 | 0.03 |
| 20 | 15.86 | 33.77 | 5.65 | 311 | 20 | 15.86 | 33.77 | 5.65 | 24.85 | 311 | 0.06 |
| 30 | 15.90 | 33.82 | 5.24 | 308 | 30 | 15.90 | 33.82 | 5.24 | 24.88 | 308 | 0.09 |

CREST; February 13, 1952; 0127 GCT; 28°13.5'N, 114°34'W; sounding, 54 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 15°. 120.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.59 | 33.62 | 5.74 | 316 | 0 | 15.59 | 33.62 | 5.74 | 24.80 | 316 | 0.00 |
| 10 | 15.62 | 33.58 | 5.75 | 319 | 10 | 15.62 | 33.58 | 5.75 | 24.76 | 319 | 0.03 |
| 20 | 15.60 | 33.55 | 5.76 | 321 | 20 | 15.60 | 33.55 | 5.76 | 24.74 | 321 | 0.06 |
| 29 | 15.58 | 33.62 | 5.77 | 316 | 30 | 15.58 | 33.62 | 5.77 | 24.80 | 316 | 0.10 |
| 48 | 14.60 | 33.57 | 5.45 | 299 | 50 | 14.60 | 33.56 | 5.39 | 24.97 | 300 | 0.16 |
| 72 | 12.73 | 33.44 | 4.73 | 272 | 75 | (12.4) | (33.44) | (4.69) | (25.32) | (266) | (0.23) |

CREST; February 12, 1952; 2204 GCT; 28°02.5'N, 114°55'W; sounding, 46 fm; wind, 340°, force 6; weather, partly cloudy; sea, very rough; wire angle, 10°. 120.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.30 | 33.49 | 5.69 | 319 | 0 | 15.30 | 33.49 | 5.69 | 24.76 | 319 | 0.00 |
| 10 | 15.31 | 33.44 | 5.72 | 323 | 10 | 15.31 | 33.44 | 5.72 | 24.72 | 323 | 0.03 |
| 20 | 15.30 | 33.51 | 5.71 | 318 | 20 | 15.30 | 33.51 | 5.71 | 24.78 | 318 | 0.06 |
| 30 | 15.31 | 33.46 | 5.74 | 322 | 30 | 15.31 | 33.46 | 5.74 | 24.74 | 322 | 0.10 |
| 49 | 15.81 | 33.71 | 5.47 | 314 | | | | | | | |

CREST; February 12, 1952; 1619 GCT; 27°43'N, 115°33'W; sounding, 1200 fm; wind, 360°, force 7; weather, cloudy; sea, high; wire angle, 18°. 120.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.78 | 5.70 | | 0 | 16.5 | 33.78 | 5.70 | 24.72 | 324 | 0.00 |
| 9 | 16.34 | 33.82 | 5.73 | 317 | 10 | 16.3 | 33.82 | 5.73 | 24.79 | 316 | 0.03 |
| 24 | - | 33.86 | 5.74 | | 20 | 16.3 | 33.86 | 5.75 | 24.82 | 314 | 0.06 |
| 52 | - | 33.86 | 4.69 | | 30 | 16.3 | 33.86 | 5.70 | 24.82 | 314 | 0.10 |
| 76 | - | 33.82 | 3.36 | | 50 | 16.0 | 33.86 | 4.82 | 24.89 | 307 | 0.16 |
| 104 | 11.42 | 33.80 | 3.16 | 222 | 75 | 12.5 | 33.82 | 3.36 | 25.60 | 240 | 0.23 |
| 156 | 9.97 | 33.97 | 2.36 | 185 | 100 | 11.3 | 33.80 | 3.21 | 25.81 | 220 | 0.28 |
| 207 | 9.60 | 34.18 | 1.60 | 164 | 150 | 10.09 | 33.94 | 2.48 | 26.13 | 189 | 0.39 |
| 310 | 9.24 | 34.47 | 0.56 | 137 | 200 | 9.61 | 34.16 | 1.70 | 26.38 | 165 | 0.48 |
| 417 | 8.00 | 34.43 | 0.40 | 121 | 250 | 9.48 | 34.37 | 1.00 | 26.57 | 148 | 0.56 |
| 520 | 6.66 | 34.42 | 0.31 | 104 | 300 | 9.28 | 34.46 | 0.60 | 26.67 | 138 | 0.63 |
| 622 | 5.89 | 34.40 | 0.27 | 96 | 400 | 8.23 | 34.44 | 0.41 | 26.82 | 124 | 0.77 |
| 827 | 4.70 | 34.37u | 0.42 | | 500 | 6.88 | 34.42 | 0.33 | 27.00 | 107 | 0.89 |
| 1032 | 3.98 | 34.54 | 0.60 | 65 | 600 | 6.01 | 34.40 | 0.28 | 27.10 | 97 | 1.00 |
| 1232 | 3.40 | 34.54 | 0.92 | 59 | 700 | 5.43 | 34.41 | 0.31 | 27.18 | 90 | 1.10 |
| | | | | | 800 | 4.86 | 34.44 | 0.40 | 27.27 | 81 | 1.20 |
| | | | | | 1000 | 4.05 | 34.54 | 0.57 | 27.44 | 65 | 1.36 |

CREST; February 12, 1952; 1114 GCT; 27°31'N, 115°52.5'W; sounding, 2175 fm; wind, 360°, force 5; weather, overcast; sea, very rough; wire angle, 28°. 120.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.66 | 5.56 | | 0 | 16.3 | 33.66 | 5.56 | 24.67 | 328 | 0.00 |
| 9 | 16.16 | 33.62 | 5.62 | 328 | 10 | 16.1 | 33.62 | 5.62 | 24.68 | 327 | 0.03 |
| 23 | - | 33.71 | 5.60 | | 20 | 16.1 | 33.70 | 5.60 | 24.75 | 321 | 0.07 |
| 49 | - | 33.66 | 5.56 | | 30 | 16.1 | 33.70 | 5.58 | 24.75 | 321 | 0.10 |
| 69 | - | 33.63 | 5.52 | | 50 | 16.0 | 33.66 | 5.55 | 24.74 | 322 | 0.16 |
| 94 | 12.33 | 33.41 | 4.91 | 267 | 75 | 15.8 | 33.62 | 5.47 | 24.75 | 320 | 0.24 |
| 139 | 10.99 | 33.82 | 3.05 | 213 | 100 | 11.90 | 33.41 | 4.68 | 25.39 | 259 | 0.32 |
| 182 | 10.41 | 34.27 | 1.53 | 170 | 150 | 10.79 | 34.04 | 2.63 | 26.09 | 193 | 0.43 |
| 271 | 9.72 | 34.44 | 0.64 | 146 | 200 | 10.26 | 34.33 | 1.21 | 26.40 | 163 | 0.52 |
| 365 | 8.47 | 34.47 | 0.40 | 125 | 250 | 9.88 | 34.42 | 0.77 | 26.54 | 150 | 0.60 |
| 453 | 7.42 | 34.35 | 0.34 | 119 | 300 | 9.40 | 34.46 | 0.54 | 26.65 | 140 | 0.68 |
| 543 | 6.54 | 34.40 | 0.23 | 104 | 400 | 8.02 | 34.43 | 0.36 | 26.84 | 121 | 0.81 |
| 721 | 5.18 | 34.40 | 0.24 | 88 | 500 | 6.98 | 34.37 | 0.29 | 26.95 | 112 | 0.94 |
| 909 | 4.36 | 34.49 | 0.48 | 72 | 600 | 6.05 | 34.40 | 0.24 | 27.09 | 98 | 1.05 |
| 1099 | 3.78 | 34.51 | 0.57 | 65 | 700 | 5.30 | 34.40 | 0.24 | 27.19 | 89 | 1.15 |
| | | | | | 800 | 4.78 | 34.43 | 0.31 | 27.27 | 81 | 1.25 |
| | | | | | 1000 | 4.05 | 34.51 | 0.52 | 27.41 | 68 | 1.41 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

120.60 CREST; February 12, 1952; 0521 GCT; 27°13'N, 116°32'W; sounding, 2150 fm; wind, 020°, force 5; weather, cloudy; sea, very rough; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.91 | 5.50 | | 0 | 17.3 | 33.91 | 5.50 | 24.63 | 332 | 0.00 |
| 9 | 17.18 | 33.87 | 5.51 | 332 | 10 | 17.2 | 33.87 | 5.51 | 24.62 | 333 | 0.03 |
| 23 | - | 33.87 | 5.43 | | 20 | 17.2 | 33.86 | 5.45 | 24.61 | 334 | 0.07 |
| 51 | - | 34.02 | 4.18 | | 30 | 17.1 | 33.96 | 5.17 | 24.71 | 324 | 0.10 |
| 73 | 13.4 | - | 4.02 | | 50 | 17.0 | 34.10 | 4.19 | 24.84 | 312 | 0.16 |
| 100 | 11.20 | 33.77 | 3.34 | 220 | 75 | 12.9 | 33.90 | 4.00 | 25.58 | 241 | 0.23 |
| 149 | 10.37 | 34.22 | 1.76 | 173 | 100 | 11.20 | 33.77 | 3.34 | 25.80 | 220 | 0.29 |
| 199 | 10.38 | 34.47 | 0.89 | 155 | 150 | 10.35 | 34.23 | 1.72 | 26.31 | 172 | 0.39 |
| 299 | 8.91 | 34.40 | 0.67 | 137 | 200 | 10.35 | 34.47 | 0.88 | 26.50 | 154 | 0.47 |
| 403 | 7.92 | 34.45 | 0.33 | 119 | 250 | 9.75 | 34.45 | 0.72 | 26.58 | 146 | 0.55 |
| 503 | 6.90 | 34.43 | 0.27 | 106 | 300 | 8.89 | 34.40 | 0.67 | 26.69 | 136 | 0.62 |
| 603 | 6.08 | 34.39 | 0.22 | 99 | 400 | 7.98 | 34.45 | 0.34 | 26.87 | 119 | 0.76 |
| 803 | 4.92 | 34.47 | 0.30 | 80 | 500 | 6.94 | 34.44 | 0.28 | 27.01 | 106 | 0.88 |
| 1007 | 4.12 | 34.54 | 0.48 | 66 | 600 | 6.10 | 34.39 | 0.22 | 27.08 | 99 | 0.99 |
| 1206 | 3.52 | 34.56 | 0.75 | 59 | 700 | 5.45 | 34.41 | 0.22 | 27.18 | 90 | 1.09 |
| | | | | | 800 | 4.94 | 34.47 | 0.30 | 27.28 | 80 | 1.19 |
| | | | | | 1000 | 4.15 | 34.54 | 0.48 | 27.43 | 66 | 1.35 |

120.70 CREST; February 11, 1952; 2318 GCT; 26°52'N, 117°10'W; sounding, 2150 fm; wind, 020°, force 4; weather, cloudy; sea, very rough; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.00 | 5.47 | | 0 | 17.8 | 34.00 | 5.47 | 24.58 | 337 | 0.00 |
| 9 | 17.47 | 33.96 | 5.47 | 332 | 10 | 17.5 | 33.96 | 5.45 | 24.62 | 333 | 0.03 |
| 24 | - | 33.96 | 5.42 | | 20 | 17.2 | 33.96 | 5.43 | 24.69 | 326 | 0.07 |
| 48 | - | 33.95 | 5.48 | | 30 | 17.1 | 33.96 | 5.43 | 24.71 | 324 | 0.10 |
| 70 | - | 33.95 | 5.42 | | 50 | 17.0 | 33.95 | 5.46 | 24.73 | 322 | 0.16 |
| 93 | 12.96 | 33.60 | 4.38 | 265 | 75 | 16.0 | 33.94 | 5.35 | 24.95 | 301 | 0.24 |
| 144 | 10.91 | 33.98 | 2.46 | 200 | 100 | 12.20 | 33.60 | 4.10 | 25.48 | 251 | 0.31 |
| 188 | 10.22 | 34.29 | 1.47 | 165 | 150 | 10.80 | 34.04 | 2.28 | 26.08 | 194 | 0.42 |
| 277 | 9.15 | 34.43 | 0.81 | 138 | 200 | 10.08 | 34.34 | 1.30 | 26.44 | 160 | 0.51 |
| 371 | 8.19 | 34.38 | 0.48 | 128 | 250 | 9.48 | 34.42 | 0.92 | 26.61 | 144 | 0.59 |
| 462 | 7.12 | 34.38 | 0.37 | 113 | 300 | 8.90 | 34.42 | 0.70 | 26.70 | 135 | 0.67 |
| 557 | 6.36 | 34.40 | 0.30 | 102 | 400 | 7.85 | 34.38 | 0.42 | 26.83 | 123 | 0.80 |
| 745 | 5.14 | 34.43 | 0.31 | 85 | 500 | 6.78 | 34.38 | 0.33 | 26.98 | 108 | 0.92 |
| 933 | 4.30 | 34.47a) | 0.48 | 73 | 600 | 6.07 | 34.41 | 0.30 | 27.10 | 97 | 1.03 |
| 1127 | 3.69 | 34.54 | 0.70 | 62 | 700 | 5.43 | 34.42 | 0.31 | 27.19 | 89 | 1.14 |
| | | | | | 800 | 4.86 | 34.44 | 0.33 | 27.27 | 81 | 1.23 |
| | | | | | 1000 | 4.08 | 34.48 | 0.52 | 27.39 | 70 | 1.40 |

120.80 CREST; February 11, 1952; 1726 GCT; 26°35'N, 117°50'W; sounding, 2250 fm; wind, 020°, force 3; weather, partly cloudy; sea, rough; wire angle, 13°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.02 | 5.45 | | 0 | 17.7 | 34.02 | 5.45 | 24.61 | 333 | 0.00 |
| 10 | 17.45 | 33.98 | 5.45 | 330 | 10 | 17.45 | 33.98 | 5.45 | 24.64 | 330 | 0.03 |
| 24 | - | 33.99 | 5.44 | | 20 | 17.4 | 33.99 | 5.45 | 24.66 | 329 | 0.07 |
| 48 | - | 33.91 | 5.51 | | 30 | 17.3 | 33.98 | 5.46 | 24.68 | 327 | 0.10 |
| 72 | - | 33.87 | 5.42 | | 50 | 17.0 | 33.90 | 5.51 | 24.69 | 326 | 0.16 |
| 95 | 12.86 | 33.69 | 3.95 | 256 | 75 | 16.7 | 33.86 | 5.40 | 24.73 | 322 | 0.25 |
| 144 | 11.04 | 34.07 | 2.02 | 195 | 100 | 12.20 | 33.70 | 3.48 | 25.56 | 243 | 0.32 |
| 190 | 10.16 | 34.27 | 1.60 | 166 | 150 | 10.87 | 34.10 | 1.99 | 26.12 | 190 | 0.43 |
| 283 | 9.48 | 34.45 | 0.52 | 142 | 200 | 10.05 | 34.30 | 1.47 | 26.42 | 162 | 0.52 |
| 381 | 8.12 | 34.40 | 0.42 | 125 | 250 | 9.70 | 34.43 | 0.75 | 26.58 | 147 | 0.60 |
| 473 | 6.94 | 34.36 | 0.35 | 112 | 300 | 9.33 | 34.45 | 0.50 | 26.65 | 139 | 0.67 |
| 569 | 6.25 | 34.38 | 0.22 | 102 | 400 | 7.88 | 34.39 | 0.40 | 26.83 | 122 | 0.81 |
| 758 | 5.06 | 34.43 | 0.28 | 84 | 500 | 6.70 | 34.36 | 0.31 | 26.98 | 109 | 0.93 |
| 947 | 4.32 | 34.53 | 0.44 | 69 | 600 | 6.02 | 34.38 | 0.22 | 27.08 | 99 | 1.04 |
| 1147 | 3.76 | 34.52 | 0.65 | 64 | 700 | 5.35 | 34.42 | 0.25 | 27.20 | 88 | 1.14 |
| | | | | | 800 | 4.90 | 34.44 | 0.34 | 27.26 | 82 | 1.24 |
| | | | | | 1000 | 4.16 | 34.53 | 0.50 | 27.42 | 67 | 1.40 |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; February 11, 1952; 1125 GCT; 26°14'N, 118°31'W; sounding, 2200 fm; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 08°. 120.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.78 | 5.52 | | 0 | 16.9 | 33.78 | 5.52 | 24.62 | 333 | 0.00 |
| 10 | 16.94 | 33.82 | 5.50 | 331 | 10 | 16.94 | 33.82 | 5.50 | 24.64 | 331 | 0.03 |
| 25 | - | 33.80 | 5.49 | | 20 | 16.8 | 33.80 | 5.49 | 24.66 | 329 | 0.07 |
| 50 | - | 33.78 | 5.47 | | 30 | 16.7 | 33.80 | 5.48 | 24.68 | 327 | 0.10 |
| 74 | - | 33.71 | 4.68 | | 50 | 16.6 | 33.78 | 5.47 | 24.69 | 326 | 0.16 |
| 99 | 12.34 | 33.75 | 3.72 | 242 | 75 | 15.6 | 33.71 | 4.60 | 24.87 | 309 | 0.24 |
| 152 | 10.55 | 33.89 | 2.88 | 200 | 100 | 12.4 | 33.76 | 3.70 | 25.57 | 242 | 0.31 |
| 199 | 9.95 | 34.14 | 2.12 | 172 | 150 | 10.60 | 33.88 | 2.90 | 25.99 | 202 | 0.43 |
| 291 | 8.70 | 34.27 | 1.11 | 143 | 200 | 9.93 | 34.14 | 2.10 | 26.31 | 172 | 0.52 |
| 390 | 7.55 | 34.31 | 0.57 | 124 | 250 | 9.25 | 34.23 | 1.50 | 26.50 | 155 | 0.61 |
| 483 | 6.33 | 34.29 | 0.47 | 109 | 300 | 8.60 | 34.28 | 1.04 | 26.64 | 141 | 0.68 |
| 581 | 5.74 | 34.36 | 0.36 | 97 | 400 | 7.35 | 34.31 | 0.54 | 26.85 | 121 | 0.82 |
| 772 | 4.82 | 34.46 | 0.43 | 79 | 500 | 6.22 | 34.29 | 0.46 | 26.99 | 108 | 0.94 |
| 962 | 4.05 | 34.49 | 0.61 | 69 | 600 | 5.63 | 34.38 | 0.36 | 27.13 | 94 | 1.05 |
| 1163 | 3.63 | 34.51 | 0.78 | 63 | 700 | 5.14 | 34.44 | 0.39 | 27.24 | 84 | 1.15 |
| | | | | | 800 | 4.71 | 34.46 | 0.45 | 27.30 | 78 | 1.24 |
| | | | | | 1000 | 3.92 | 34.50 | 0.63 | 27.42 | 67 | 1.40 |

CREST; February 15, 1952; 0411 GCT;[a] 27°37.5'N, 115°04'W; sounding, 290 fm; wind, 360°, force 4; weather, clear; sea, rough; wire angle, 15°. 122$^5$.40

| | | | |
|---|---|---|---|
| 0 | 16.1 | 33.87 | 308 |
| 9 | 15.95 | 33.80 | 310 |
| 19 | - | 33.84 | |
| 28 | - | 33.84 | |
| 47 | - | 33.68 | |
| 66 | 12.66 | 33.73 | 249 |
| 84 | 11.48 | 33.82 | 222 |
| 103 | 11.28 | 34.05 | 201 |
| 112 | 11.11 | 34.21 | 186 |
| 121 | 11.09 | 34.24 | 184 |
| 125 | 11.10 | 34.25 | 183 |
| 130 | 11.11 | 34.29 | 180 |
| 186 | 10.82 | 34.49 | 161 |
| 233 | 10.46 | 34.54 | 151 |
| 280 | 9.78 | 34.49 | 144 |

CREST; February 15, 1952; 0506 GCT;[a] 27°37.5'N, 115°04'W; sounding, 290 fm; wind, 360°, force 4; weather, clear; sea, rough; wire angle, 11°. 122$^5$.40

| | | | |
|---|---|---|---|
| 0 | 16.1 | 33.89 | 307 |
| 10 | 15.99 | 33.87 | 306 |
| 20 | - | 33.86 | |
| 29 | - | 33.82 | |
| 48 | - | 33.64 | |
| 67 | 12.68 | 33.77 | 247 |
| 86 | 11.36 | 33.82 | 219 |
| 104 | 11.02 | 33.97 | 202 |
| 114 | 11.16 | 34.05 | 199 |
| 123 | 11.07 | 34.20 | 186 |
| 127 | 10.97 | 34.16 | 188 |
| 132 | 10.98 | 34.22 | 183 |
| 187 | 10.80 | 34.43 | 165 |
| 233 | 10.39 | 34.49 | 153 |
| 282 | 9.86 | 34.49 | 145 |

a) Bathythermograph calibration cast.

SIO
CCOFI
5202

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

123.37 CREST; February 14, 1952; 1608 GCT; 27°23'N, 114°41'W; sounding, 40 fm; wind, 020°, force 5; weather, clear; sea, rough; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.33 | 34.05 | 5.40 | 323 | 0 | 17.33 | 34.05 | 5.40 | 24.73 | 323 | 0.00 |
| 10 | 17.34 | 34.05 | 5.41 | 323 | 10 | 17.34 | 34.05 | 5.41 | 24.72 | 323 | 0.03 |
| 20 | 17.31 | 34.09 | 5.38 | 319 | 20 | 17.31 | 34.09 | 5.38 | 24.76 | 319 | 0.06 |
| 30 | 17.32 | 34.07 | 5.45 | 321 | 30 | 17.32 | 34.07 | 5.45 | 24.74 | 321 | 0.10 |
| 50 | 14.44 | 33.69 | 4.96 | 287 | 50 | 14.44 | 33.69 | 4.96 | 25.10 | 287 | 0.16 |

123.40 CREST; February 14, 1952; 1257 GCT; 27°19'N, 114°51'W; sounding, 300 fm; wind, 240°, force 5; weather, clear; sea, high; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.04 | 5.58 | | 0 | 17.5 | 34.04 | 5.58 | 24.68 | 327 | 0.00 |
| 9 | 17.15 | 33.98 | 5.53 | 324 | 10 | 17.2 | 33.98 | 5.53 | 24.70 | 325 | 0.03 |
| 23 | - | 34.05 | 5.62 | | 20 | 17.2 | 34.05 | 5.61 | 24.76 | 320 | 0.06 |
| 47 | - | 33.77 | 4.98 | | 30 | 17.2 | 34.05 | 5.59 | 24.76 | 320 | 0.10 |
| 71 | - | 33.63 | 4.12 | | 50 | 14.2 | 33.72 | 4.86 | 25.18 | 280 | 0.16 |
| 94 | 11.78 | 33.95 | 2.74 | 217 | 75 | 11.8 | 33.63 | 3.85 | 25.58 | 241 | 0.22 |
| 144 | 11.15 | 34.29 | 1.39 | 181 | 100 | 11.60 | 33.99 | 2.50 | 25.90 | 211 | 0.28 |
| 190 | 10.63 | 34.39 | 0.64 | 165 | 150 | 11.07 | 34.33 | 1.25 | 26.26 | 177 | 0.38 |
| 236 | 10.22 | 34.52 | 0.51 | 148 | 200 | 10.55 | 34.50 | 0.60 | 26.49 | 155 | 0.46 |
| 281 | 9.46 | 34.49 | 0.46 | 139 | 250 | 10.00 | 34.52 | 0.49 | 26.60 | 145 | 0.54 |
| 331 | 8.80 | 34.45 | 0.45 | 131 | 300 | 9.18 | 34.48 | 0.45 | 26.70 | 135 | 0.61 |
| 378 | 8.08 | 34.40 | 0.42 | 125 | 400 | 7.82 | 34.40 | 0.41 | 26.85 | 121 | 0.75 |
| 424 | 7.52 | 34.40 | 0.37 | 117 | 500 | (6.70) | (34.43) | | (27.03) | (104) | (0.87) |

123.50 CREST; February 14, 1952; 0607 GCT; 27°01'N, 115°32'W; sounding, 1790 fm; wind, 350°, force 6; weather, clear; sea, high; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.86 | 5.49 | | 0 | 17.1 | 33.86 | 5.49 | 24.64 | 331 | 0.00 |
| 8 | 17.11 | 33.84 | 5.47 | 333 | 10 | 17.1 | 33.84 | 5.46 | 24.62 | 333 | 0.03 |
| 22 | - | 33.89 | 5.47 | | 20 | 17.1 | 33.88 | 5.46 | 24.65 | 330 | 0.07 |
| 47 | - | 33.87 | 5.46 | | 30 | 17.1 | 33.88 | 5.46 | 24.65 | 330 | 0.10 |
| 67 | - | 33.87 | 5.46 | | 50 | 17.0 | 33.87 | 5.46 | 24.67 | 328 | 0.17 |
| 88 | 14.77 | 33.68 | 5.18 | 294 | 75 | 16.1 | 33.86 | 5.42 | 24.87 | 309 | 0.25 |
| 127 | 11.60 | 33.73 | 3.59 | 230 | 100 | 12.90 | 33.69 | 4.77 | 25.42 | 257 | 0.32 |
| 164 | 10.90 | 34.09 | 2.16 | 192 | 150 | 11.08 | 33.87 | 2.65 | 25.90 | 211 | 0.44 |
| 242 | 10.16 | 34.48 | 0.64 | 150 | 200 | 10.57 | 34.44 | 1.10 | 26.44 | 160 | 0.53 |
| 321 | 8.76 | 34.42 | 0.68 | 133 | 250 | 10.05 | 34.48 | 0.65 | 26.56 | 149 | 0.61 |
| 398 | 7.94 | 34.42 | 0.37 | 121 | 300 | 9.10 | 34.44 | 0.67 | 26.68 | 137 | 0.68 |
| 473 | 6.88 | 34.38 | 0.42 | 110 | 400 | 7.91 | 34.42 | 0.36 | 26.85 | 121 | 0.82 |
| 635 | 5.90 | 34.43 | 0.50 | 94 | 500 | 6.70 | 34.38 | 0.32 | 26.99 | 107 | 0.94 |
| 811 | 4.95 | 34.45 | 0.33 | 81 | 600 | 6.12 | 34.42 | 0.24 | 27.10 | 97 | 1.05 |
| 1000 | 4.14 | 34.54 | 0.23 | 66 | 700 | 5.51 | 34.44 | 0.26 | 27.19 | 88 | 1.15 |
| | | | | | 800 | 5.00 | 34.45 | 0.41 | 27.26 | 82 | 1.25 |
| | | | | | 1000 | 4.14 | 34.54 | 0.23 | 27.43 | 66 | 1.41 |

123.60 CREST; February 14, 1952; 0010 GCT; 26°44'N, 116°05'W; sounding, 1900 fm; wind, 330°, force 6; weather, partly cloudy; sea, high; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.00 | 5.47 | | 0 | 17.6 | 34.00 | 5.47 | 24.62 | 332 | 0.00 |
| 9 | 17.34 | 33.93 | 5.45 | 332 | 10 | 17.3 | 33.93 | 5.45 | 24.64 | 331 | 0.03 |
| 22 | - | 33.98 | 5.49 | | 20 | 17.3 | 33.98 | 5.49 | 24.68 | 327 | 0.07 |
| 46 | - | 33.96 | 5.46 | | 30 | 17.3 | 33.98 | 5.49 | 24.68 | 327 | 0.10 |
| 67 | - | 33.96 | 5.43 | | 50 | 17.1 | 33.96 | 5.44 | 24.71 | 324 | 0.16 |
| 89 | 15.80 | 33.86 | 5.30 | 303 | 75 | 16.6 | 33.95 | 5.39 | 24.82 | 314 | 0.24 |
| 131 | 11.09 | 33.64 | 4.21 | 228 | 100 | 13.70 | 33.79 | 5.11 | 25.33 | 265 | 0.32 |
| 172 | 10.48 | 33.98 | 2.96 | 193 | 150 | 10.74 | 33.69 | 3.62 | 25.82 | 218 | 0.44 |
| 255 | 9.33 | 34.40 | 1.23 | 143 | 200 | 10.10 | 34.34 | 2.22 | 26.44 | 160 | 0.54 |
| 344 | 8.42 | 34.40 | 0.57 | 129 | 250 | 9.40 | 34.43 | 1.31 | 26.63 | 142 | 0.61 |
| 431 | 7.52 | 34.34 | 0.41 | 121 | 300 | 8.84 | 34.40 | 0.80 | 26.69 | 136 | 0.69 |
| 521 | 6.74 | 34.36 | 0.30 | 109 | 400 | 7.82 | 34.36 | 0.47 | 26.82 | 124 | 0.82 |
| 698 | 5.44 | 34.40 | 0.31 | 91 | 500 | 6.93 | 34.35 | 0.32 | 26.94 | 113 | 0.95 |
| 882 | 4.65 | 34.49 | 0.40 | 75 | 600 | 6.14 | 34.38 | 0.30 | 27.07 | 100 | 1.06 |
| 1075 | 3.92 | 34.47 | 0.62 | 69 | 700 | 5.43 | 34.40 | 0.31 | 27.17 | 90 | 1.17 |
| | | | | | 800 | 4.96 | 34.45 | 0.34 | 27.27 | 81 | 1.26 |
| | | | | | 1000 | 4.19 | 34.48 | 0.52 | 27.37 | 71 | 1.43 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m | |
| BLACK DOUGLAS; February 23, 1952; 0304 GCT; 26°00'N, 115°48'W; sounding, 2050 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 18°. | | | | | | | | | | | | 127.60 |
| 0 | - | 34.02 | | | 0 | 17.3 | 34.02 | | 24.71 | 324 | 0.00 | |
| 9 | 17.30 | 34.00 | | 326 | 10 | 17.3 | 34.00 | | 24.70 | 326 | 0.03 | |
| 24 | - | 34.02 | | | 20 | 17.3 | 34.01 | | 24.70 | 325 | 0.07 | |
| 48 | - | 34.04a) | | | 30 | 17.3 | 34.02 | | 24.71 | 324 | 0.10 | |
| 72 | - | 34.04 | | | 50 | 17.3 | 34.04 | | 24.73 | 323 | 0.16 | |
| 95 | 17.26 | - | | | 75 | 17.3 | 34.04 | | 24.73 | 323 | 0.24 | |
| 145 | 11.54 | 33.82 | | 223 | 100 | 17.20 | 34.04 | | 24.75 | 320 | 0.32 | |
| 188 | 10.63 | 34.09 | | 187 | 150 | 11.36 | 33.82 | | 25.81 | 219 | 0.46 | |
| 274 | 9.86 | 34.38 | | 153 | 200 | 10.54 | 34.20 | | 26.25 | 177 | 0.56 | |
| 367 | 8.48 | 34.36 | | 133 | 250 | 10.12 | 34.36 | | 26.45 | 159 | 0.65 | |
| 458 | 7.69 | 34.43 | | 117 | 300 | 9.40 | 34.39 | | 26.60 | 145 | 0.73 | |
| 549 | 6.72 | 34.43 | | 104 | 400 | 8.20 | 34.38 | | 26.78 | 128 | 0.87 | |
| 729 | 5.40 | 34.47 | | 85 | 500 | 7.27 | 34.43 | | 26.95 | 111 | 1.00 | |
| 912 | 4.45 | - | | | 600 | 6.30 | 34.44 | | 27.09 | 98 | 1.11 | |
| 1110 | 3.90 | 34.54 | | 64 | 700 | 5.59 | 34.46 | | 27.20 | 88 | 1.21 | |
| | | | | | 800 | 4.98 | 34.48 | | 27.29 | 79 | 1.30 | |
| | | | | | 1000 | 4.18 | 34.52 | | 27.41 | 68 | 1.47 | |
| BLACK DOUGLAS; February 21, 1952; 0651 GCT; 26°29'N, 113°29'W; sounding, 45 fm; wind, 280°, force 1; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | | 130.30 |
| 0 | 17.26 | 34.25 | | 307 | 0 | 17.26 | 34.25 | | 24.90 | 307 | 0.00 | |
| 10 | 17.26 | 34.33u | | - | 10 | 17.26 | 34.26 | | 24.90 | 306 | 0.03 | |
| 20 | 17.27 | 34.29 | | 304 | 20 | 17.27 | 34.29 | | 24.92 | 304 | 0.06 | |
| 30 | 17.12 | 34.25a) | | 303 | 30 | 17.12 | 34.25 | | 24.93 | 303 | 0.09 | |
| 50 | 15.60 | 34.05 | | 285 | 50 | 15.60 | 34.05 | | 25.13 | 285 | 0.15 | |
| 75 | 13.16 | 33.96 | | 242 | 75 | 13.16 | 33.96 | | 25.58 | 242 | 0.22 | |
| BLACK DOUGLAS; February 21, 1952; 2232 GCT; 26°18.5'N, 113°49.5'W; sounding, 150 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | | 130.35 |
| 0 | 17.76 | 34.27 | | 317 | 0 | 17.76 | 34.27 | | 24.79 | 317 | 0.00 | |
| 11 | 17.74 | - | | | 10 | 17.74 | 34.27 | | 24.80 | 316 | 0.03 | |
| 26 | 17.72 | 34.28 | | 315 | 20 | 17.73 | 34.28 | | 24.81 | 315 | 0.06 | |
| 49 | 17.74 | 34.31 | | 313 | 30 | 17.72 | 34.28 | | 24.81 | 315 | 0.09 | |
| 73 | 14.33 | 34.04 | | 259 | 50 | 17.73 | 34.31 | | 24.83 | 313 | 0.16 | |
| 97 | 13.04 | 34.10 | | 229 | 75 | 14.14 | 34.04 | | 25.44 | 255 | 0.23 | |
| 150 | 12.11 | 34.54 | | 180 | 100 | 12.94 | 34.12 | | 25.74 | 226 | 0.29 | |
| 198 | 11.82 | 34.61 | | 169 | 150 | 12.11 | 34.54 | | 26.23 | 180 | 0.39 | |
| | | | | | 200 | (11.79) | (34.61) | | (26.35) | (169) | (0.48) | |
| BLACK DOUGLAS; February 22, 1952; 0215 GCT; 26°09'N, 114°07.5'W; sounding, 1100 fm; wind, 290°, force 3; weather, overcast; sea, rough; wire angle, 09°. | | | | | | | | | | | | 130.40 |
| 0 | - | 34.21 | | | 0 | 17.9 | 34.21 | | 24.71 | 324 | 0.00 | |
| 10 | 17.78 | 34.20 | | 322 | 10 | 17.78 | 34.20 | | 24.73 | 322 | 0.03 | |
| 25 | - | 34.23 | | | 20 | 17.7 | 34.21 | | 24.76 | 319 | 0.06 | |
| 50 | - | 34.02 | | | 30 | 17.7 | 34.23 | | 24.78 | 318 | 0.10 | |
| 74 | - | 33.64 | | | 50 | 17.4 | 34.02 | | 24.69 | 326 | 0.16 | |
| 98 | 13.74 | 34.13 | | 241 | 75 | 13.5 | 33.64 | | 25.26 | 272 | 0.24 | |
| 149 | 12.05 | 34.38 | | 190 | 100 | 13.70 | 34.14 | | 25.60 | 239 | 0.30 | |
| 195 | 11.59 | 34.63 | | 164 | 150 | 12.04 | 34.38 | | 26.12 | 190 | 0.41 | |
| 285 | 9.90 | 34.56 | | 140 | 200 | 11.52 | 34.63 | | 26.41 | 163 | 0.50 | |
| 379 | 8.14 | 34.54 | | 115 | 250 | 10.44 | 34.59 | | 26.58 | 147 | 0.58 | |
| 469 | 7.51 | 34.45 | | 113 | 300 | 9.72 | 34.56 | | 26.68 | 137 | 0.65 | |
| 564 | 6.45 | 34.47 | | 97 | 400 | 8.45 | 34.52 | | 26.85 | 121 | 0.79 | |
| 751 | 5.22 | 34.49 | | 81 | 500 | 7.14 | 34.45 | | 26.99 | 108 | 0.91 | |
| 938 | 4.36 | 34.54 | | 68 | 600 | 6.18 | 34.48 | | 27.14 | 93 | 1.02 | |
| 1136 | 3.74 | 34.60 | | 58 | 700 | 5.53 | 34.48 | | 27.22 | 86 | 1.12 | |
| | | | | | 800 | 4.99 | 34.49 | | 27.29 | 79 | 1.21 | |
| | | | | | 1000 | 4.13 | 34.57 | | 27.45 | 64 | 1.37 | |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 130.50 | BLACK DOUGLAS; February 22, 1952; 0845 GCT; 25°49'N, 114°46'W; sounding, 1980 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 17°. | | | | | | | | | | |
| 0 | - | 34.14 | | | 0 | 17.2 | 34.14 | | 24.83 | 313 | 0.00 |
| 9 | 17.18 | 34.13 | | 313 | 10 | 17.1 | 34.13 | | 24.84 | 312 | 0.03 |
| 25 | - | 34.14 | | | 20 | 17.1 | 34.14 | | 24.85 | 311 | 0.06 |
| 49 | - | 34.13 | | | 30 | 17.0 | 34.14 | | 24.87 | 309 | 0.09 |
| 72 | - | 33.60 | | | 50 | 17.0 | 34.13 | | 24.87 | 309 | 0.16 |
| 95 | 11.75 | 33.68 | | 237 | 75 | 12.5 | 33.60 | | 25.43 | 256 | 0.23 |
| 144 | 10.34 | 34.02 | | 187 | 100 | 11.40 | 33.71 | | 25.72 | 228 | 0.29 |
| 187 | 10.01 | 34.31 | | 161 | 150 | 10.29 | 34.06 | | 26.19 | 184 | 0.39 |
| 273 | 8.82 | 34.31 | | 142 | 200 | 9.79 | 34.32 | | 26.48 | 156 | 0.48 |
| 364 | 7.98 | 34.40 | | 123 | 250 | 9.07 | 34.31 | | 26.59 | 146 | 0.56 |
| 451 | 7.27 | 34.42 | | 112 | 300 | 8.56 | 34.33 | | 26.68 | 137 | 0.63 |
| 543 | 6.51 | 34.42 | | 102 | 400 | 7.68 | 34.41 | | 26.88 | 118 | 0.76 |
| 724 | 5.14 | 34.42 | | 86 | 500 | 6.87 | 34.42 | | 27.00 | 107 | 0.88 |
| 908 | 4.43 | 34.52 | | 71 | 600 | 6.01 | 34.42 | | 27.11 | 96 | 0.99 |
| 1103 | 3.82 | 34.52 | | 65 | 700 | 5.28 | 34.42 | | 27.20 | 87 | 1.09 |
| | | | | | 800 | 4.80 | 34.45 | | 27.28 | 80 | 1.18 |
| | | | | | 1000 | 4.13 | 34.52 | | 27.41 | 68 | 1.35 |
| 130.60 | BLACK DOUGLAS; February 22, 1952; 1516 GCT; 25°29'N, 115°24'W; sounding, 2050 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 16°. | | | | | | | | | | |
| 0 | - | 33.87 | | | 0 | 16.8 | 33.87 | | 24.71 | 324 | 0.00 |
| 12 | 16.68 | 33.93u | | | 10 | 16.7 | 33.87 | | 24.74 | 322 | 0.03 |
| 26 | - | 33.84 | | | 20 | 16.7 | 33.86 | | 24.73 | 322 | 0.06 |
| 50 | - | 33.84 | | | 30 | 16.7 | 33.84 | | 24.71 | 324 | 0.10 |
| 74 | - | 33.80 | | | 50 | 16.7 | 33.84 | | 24.71 | 324 | 0.16 |
| 98 | 15.89 | 33.75 | | 313 | 75 | 16.5 | 33.80 | | 24.73 | 322 | 0.24 |
| 148 | 11.55 | 33.89 | | 218 | 100 | 13.50 | 33.75 | | 25.34 | 264 | 0.32 |
| 190 | 10.12 | 34.05 | | 182 | 150 | 11.14 | 33.90 | | 25.91 | 210 | 0.44 |
| 276 | 9.86 | 34.43 | | 149 | 200 | 10.09 | 34.09 | | 26.25 | 178 | 0.54 |
| 364 | 8.66 | 34.42 | | 132 | 250 | 10.00 | 34.35 | | 26.46 | 157 | 0.62 |
| 449 | 7.73 | 34.44 | | 117 | 300 | 9.63 | 34.43 | | 26.59 | 146 | 0.70 |
| 538 | 6.86 | 34.45 | | 104 | 400 | 8.22 | 34.43 | | 26.81 | 124 | 0.84 |
| 716 | 5.51 | - | | | 500 | 7.23 | 34.44 | | 26.97 | 110 | 0.97 |
| 896 | 4.62 | - | | | 600 | 6.33 | | | | | |
| 1089 | 3.98 | - | | | 700 | 5.62 | | | | | |
| | | | | | 800 | 5.06 | | | | | |
| | | | | | 1000 | 4.26 | | | | | |
| 133.25 | BLACK DOUGLAS; February 21, 1952; 0118 GCT; 26°04.5'N, 112°48'W; sounding, 46 fm; wind, 280°, force 2; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 18.72 | 34.45 | | 326 | 0 | 18.72 | 34.45 | | 24.69 | 326 | 0.00 |
| 10 | 18.75 | 34.51 | | 322 | 10 | 18.75 | 34.51 | | 24.73 | 322 | 0.03 |
| 20 | 18.60 | 34.49 | | 320 | 20 | 18.60 | 34.49 | | 24.75 | 320 | 0.06 |
| 30 | 18.39 | 34.49 | | 315 | 30 | 18.39 | 34.49 | | 24.80 | 315 | 0.10 |
| 50 | 16.14 | 34.14 | | 290 | 50 | 16.14 | 34.14 | | 25.07 | 290 | 0.16 |
| 75 | 14.11 | 34.16 | | 246 | 75 | 14.11 | 34.16 | | 25.53 | 246 | 0.22 |
| 133.30 | BLACK DOUGLAS; February 20, 1952; 2155 GCT; 25°54.5'N, 113°09'W; sounding, 106 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 18.93 | 34.51 | | 327 | 0 | 18.93 | 34.51 | | 24.68 | 327 | 0.00 |
| 10 | 18.92 | 34.51 | | 326 | 10 | 18.92 | 34.51 | | 24.69 | 326 | 0.03 |
| 25 | 18.78 | 34.49 | | 325 | 20 | 18.80 | 34.50 | | 24.71 | 324 | 0.07 |
| 51 | 18.72 | 34.47 | | 325 | 30 | 18.77 | 34.49 | | 24.71 | 324 | 0.10 |
| 74 | 14.80 | 34.09 | | 265 | 50 | 18.72 | 34.47 | | 24.71 | 325 | 0.16 |
| 99 | 13.97 | 34.15 | | 244 | 75 | 14.75 | 34.09 | | 25.34 | 264 | 0.24 |
| 123 | 12.99 | 34.43 | | 204 | 100 | 13.89 | 34.18 | | 25.60 | 240 | 0.30 |
| 152 | 12.64 | 34.45 | | 196 | 150 | 12.66 | 34.45 | | 26.05 | 196 | 0.41 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; February 20, 1952; 1625 GCT; 25°34.5'N, 113°45.5'W; sounding, 1000 fm; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | | 133.40 |
| 0 | - | 34.53 | | | 0 | 19.0 | 34.53 | | 24.68 | 327 | 0.00 |
| 10 | 18.97 | 34.52 | | 327 | 10 | 18.97 | 34.52 | | 24.68 | 327 | 0.03 |
| 26 | - | 34.56 | | | 20 | 19.0 | 34.56 | | 24.70 | 325 | 0.07 |
| 51 | - | 34.52 | | | 30 | 19.0 | 34.56 | | 24.70 | 325 | 0.10 |
| 75 | - | 33.98 | | | 50 | 18.8 | 34.53 | | 24.73 | 322 | 0.16 |
| 99 | - | 34.27 | | | 75 | 14.6 | 33.98 | | 25.29 | 269 | 0.24 |
| 150 | 11.58 | 34.27 | | 190 | 100 | 13.8 | 34.27 | | 25.68 | 232 | 0.30 |
| 196 | 10.89 | 34.49 | | 162 | 150 | 11.58 | 34.27 | | 26.12 | 190 | 0.41 |
| 287 | 9.79 | 34.54 | | 140 | 200 | 10.83 | 34.50 | | 26.44 | 160 | 0.50 |
| 382 | 8.24 | 34.45 | | 123 | 250 | 10.23 | 34.54 | | 26.57 | 147 | 0.58 |
| 474 | 7.31 | 34.46 | | 109 | 300 | 9.61 | 34.53 | | 26.67 | 138 | 0.65 |
| 571 | 6.39 | 34.45 | | 98 | 400 | 8.06 | 34.44 | | 26.85 | 121 | 0.79 |
| 760 | 5.14 | 34.46 | | 83 | 500 | 7.05 | 34.46 | | 27.01 | 106 | 0.91 |
| 949 | 4.26 | 34.52 | | 69 | 600 | 6.17 | 34.44 | | 27.11 | 96 | 1.02 |
| 1149 | 3.65 | 34.53 | | 62 | 700 | 5.50 | 34.45 | | 27.20 | 88 | 1.12 |
| | | | | | 800 | 4.93 | 34.47 | | 27.29 | 80 | 1.21 |
| | | | | | 1000 | 4.07 | 34.53 | | 27.43 | 66 | 1.37 |
| BLACK DOUGLAS; February 20, 1952; 0745 GCT; 25°14.5'N, 114°24'W; sounding, 1680 fm; wind, 360°, force 4; weather, clear; sea, rough; wire angle, 03°. | | | | | | | | | | | 133.50 |
| 0 | - | 34.33 | | | 0 | 18.2 | 34.33 | | 24.73 | 322 | 0.00 |
| 10 | 18.25 | - | | | 10 | 18.25 | 34.35 | | 24.73 | 322 | 0.03 |
| 25 | - | 34.36 | | | 20 | (18.30) | 34.36 | | (24.73) | (323) | (0.06) |
| 50 | - | 34.38 | | | 30 | (18.30) | 34.37 | | (24.74) | (322) | (0.10) |
| 75 | - | 34.27 | | | 50 | (18.30) | 34.38 | | (24.74) | (321) | (0.16) |
| 99 | 13.84 | 33.93 | | 257 | 75 | (15.50) | 34.27 | | (25.32) | (266) | (0.24) |
| 151 | 11.60 | 34.34 | | 185 | 100 | 13.80 | 33.93 | | 25.42 | 257 | (0.30) |
| 198 | 10.79 | 34.49 | | 160 | 150 | 11.62 | 34.33 | | 26.16 | 186 | (0.41) |
| 290 | 9.48 | 34.51 | | 137 | 200 | 10.77 | 34.49 | | 26.44 | 160 | (0.50) |
| 388 | 8.07 | 34.45 | | 121 | 250 | 10.06 | 34.52 | | 26.59 | 146 | (0.58) |
| 481 | 7.14 | 34.45 | | 108 | 300 | 9.31 | 34.51 | | 26.70 | 135 | (0.65) |
| 579 | 6.31 | 34.45 | | 97 | 400 | 7.91 | 34.45 | | 26.88 | 118 | (0.79) |
| 772 | 5.08 | 34.45 | | 83 | 500 | 6.96 | 34.45 | | 27.01 | 106 | (0.91) |
| 963 | 4.29 | 34.52 | | 69 | 600 | 6.16 | 34.45 | | 27.12 | 95 | (1.01) |
| 1164 | 3.65 | 34.56 | | 60 | 700 | 5.48 | 34.45 | | 27.20 | 87 | (1.11) |
| | | | | | 800 | 4.93 | 34.45 | | 27.27 | 81 | (1.21) |
| | | | | | 1000 | 4.17 | 34.52 | | 27.41 | 68 | (1.37) |
| BLACK DOUGLAS; February 18, 1952; 2305 GCT; 25°34'N, 112°18.5'W; sounding, 40 fm; wind, 300°, force 6; weather, clear; sea, rough; wire angle, 00°. | | | | | | | | | | | 137.23 |
| 0 | 19.36 | 34.52 | | 336 | 0 | 19.36 | 34.52 | | 24.58 | 336 | 0.00 |
| 10 | 19.35 | 34.54 | | 335 | 10 | 19.35 | 34.54 | | 24.60 | 335 | 0.03 |
| 21 | 19.20 | 34.51 | | 333 | 20 | 19.20 | 34.51 | | 24.62 | 333 | 0.07 |
| 31 | 19.12 | 34.56 | | 328 | 30 | 19.13 | 34.56 | | 24.67 | 328 | 0.10 |
| 50 | 10.86 | 34.33 | | 173 | 50 | 10.86 | 34.33 | | 26.30 | 173 | 0.15 |
| BLACK DOUGLAS; February 19, 1952; 0315 GCT; 25°20'N, 112°45.5'W; sounding, 100 fm; wind, 300°, force 6; weather, clear; sea, rough; wire angle, 05°. | | | | | | | | | | | 137.30 |
| 0 | 19.66 | 34.51 | | 345 | 0 | 19.66 | 34.51 | | 24.50 | 345 | 0.00 |
| 10 | 19.67 | 34.56 | | 341 | 10 | 19.67 | 34.56 | | 24.53 | 341 | 0.03 |
| 25 | 19.71 | 34.52 | | 345 | 20 | 19.70 | 34.53 | | 24.50 | 344 | 0.07 |
| 50 | 19.54 | 34.49 | | 343 | 30 | 19.70 | 34.51 | | 24.49 | 346 | 0.10 |
| 73 | 15.35 | 34.04 | | 280 | 50 | 19.54 | 34.49 | | 24.51 | 343 | 0.17 |
| 96 | 13.44 | 34.25 | | 226 | 75 | 15.15 | 34.04 | | 25.22 | 276 | 0.25 |
| 120 | 12.86 | 34.43 | | 202 | 100 | 13.30 | 34.29 | | 25.80 | 220 | 0.31 |
| 148 | 12.41 | 34.58 | | 182 | 150 | (12.39) | (34.60) | | (26.22) | (180) | (0.41) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **137.40** | BLACK DOUGLAS; February 19, 1952; 1312 GCT; 25°03.5'N, 113°26'W; sounding, 1200 fm; wind, 330°, force 7; weather, partly cloudy; sea, very rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 19.48 | 34.51 | | 340 | 0 | 19.48 | 34.51 | | 24.54 | 340 | 0.00 |
| 10 | 19.46 | 34.56 | | 336 | 10 | 19.46 | 34.56 | | 24.59 | 336 | 0.03 |
| **137.50** | BLACK DOUGLAS; February 19, 1952; 2323 GCT; 24°40'N, 114°02'W; sounding, 1600 fm; wind, 360°, force 6; weather, clear; sea, rough; wire angle, 21°. | | | | | | | | | | |
| 0 | - | 34.36 | | | 0 | 19.0 | 34.36 | | 24.55 | 339 | 0.00 |
| 9 | 18.96 | - | | | 10 | 18.9 | 34.36 | | 24.58 | 337 | 0.03 |
| 24 | - | 34.35 | | | 20 | 18.9 | 34.38 | | 24.59 | 335 | 0.07 |
| 52 | - | 34.34 | | | 30 | 18.8 | 34.35 | | 24.60 | 335 | 0.10 |
| 74 | - | 33.98 | | | 50 | 18.7 | 34.35 | | 24.62 | 333 | 0.17 |
| 100 | 12.40 | 33.69 | | 248 | 75 | 16.1 | 33.97 | | 24.95 | 301 | 0.25 |
| 147 | 11.57 | 34.11 | | 202 | 100 | 12.40 | 33.69 | | 25.52 | 248 | 0.32 |
| 192 | 10.55 | 34.31 | | 169 | 150 | 11.44 | 34.13 | | 26.04 | 198 | 0.43 |
| 283 | 9.66 | 34.52 | | 139 | 200 | 10.46 | 34.33 | | 26.37 | 166 | 0.52 |
| 378 | 8.64 | 34.42 | | 131 | 250 | 9.98 | 34.48 | | 26.57 | 148 | 0.60 |
| 470 | 7.43 | 34.43 | | 113 | 300 | 9.49 | 34.51 | | 26.67 | 138 | 0.68 |
| 561 | 6.64 | 34.43 | | 103 | 400 | 8.31 | 34.42 | | 26.79 | 126 | 0.82 |
| 743 | 5.37 | 34.43 | | 88 | 500 | 7.16 | 34.43 | | 26.97 | 110 | 0.94 |
| 936 | 4.40 | 34.51 | | 71 | 600 | 6.33 | 34.43 | | 27.08 | 99 | 1.05 |
| 1129 | 3.78 | 34.52 | | 64 | 700 | 5.64 | 34.43 | | 27.17 | 91 | 1.16 |
| | | | | | 800 | 5.01 | 34.45 | | 27.26 | 82 | 1.25 |
| | | | | | 1000 | 4.18 | 34.51 | | 27.40 | 69 | 1.42 |
| **140.30** | BLACK DOUGLAS; February 16, 1952; 1725 GCT; 24°45.5'N, 112°24'W; sounding, 60 fm; wind, 010°, force 2; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 19.92 | 34.47 | | 354 | 0 | 19.92 | 34.47 | | 24.40 | 354 | 0.00 |
| 10 | 19.87 | 34.52 | | 349 | 10 | 19.87 | 34.52 | | 24.45 | 349 | 0.04 |
| 20 | 19.82 | 34.49 | | 350 | 20 | 19.82 | 34.49 | | 24.44 | 350 | 0.07 |
| 30 | 19.60 | 34.45 | | 347 | 30 | 19.60 | 34.45 | | 24.47 | 347 | 0.11 |
| 49 | 16.65 | 34.16 | | 299 | 50 | 16.60 | 34.16 | | 24.98 | 298 | 0.17 |
| 73 | 13.59 | 34.18 | | 234 | 75 | 13.55 | 34.18 | | 25.67 | 233 | 0.24 |
| 97 | 13.31 | 34.27 | | 222 | 100 | (13.27) | (34.29) | | (25.81) | (220) | (0.29) |
| **140.35** | BLACK DOUGLAS; February 16, 1952; 1353 GCT; 24°36'N, 112°43'W; sounding, 100 fm; wind, 020°, force 2; weather, partly cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 20.38 | 34.53 | | 361 | 0 | 20.38 | 34.53 | | 24.32 | 361 | 0.00 |
| 10 | 20.38 | 34.54 | | 360 | 10 | 20.38 | 34.54 | | 24.33 | 360 | 0.04 |
| 25 | 20.38 | 34.51 | | 363 | 20 | 20.38 | 34.52 | | 24.32 | 362 | 0.07 |
| 50 | 20.11 | 34.53 | | 354 | 30 | 20.34 | 34.51 | | 24.32 | 362 | 0.11 |
| 73 | 15.60 | 34.04 | | 285 | 50 | 20.11 | 34.53 | | 24.39 | 354 | 0.18 |
| 97 | 12.83 | 34.05 | | 229 | 75 | 15.50 | 34.04 | | 25.14 | 283 | 0.26 |
| 121 | 12.19 | 34.31 | | 198 | 100 | 12.70 | 34.06 | | 25.74 | 226 | 0.32 |
| 150 | 11.98 | 34.49 | | 181 | 150 | 11.98 | 34.49 | | 26.22 | 181 | 0.43 |
| **140.40** | BLACK DOUGLAS; February 16, 1952; 1000 GCT; 24°25.5'N, 113°02'W; sounding, 1700 fm; wind, 350°, force 3; weather, partly cloudy; sea, rough; wire angle, 15°. | | | | | | | | | | |
| 0 | - | 34.58 | | | 0 | 19.8 | 34.58 | | 24.51 | 343 | 0.00 |
| 9 | 19.76 | 34.56 | | 343 | 10 | 19.8 | 34.56 | | 24.50 | 344 | 0.03 |
| 24 | - | 34.58 | | | 20 | 19.8 | 34.57 | | 24.51 | 344 | 0.07 |
| 48 | - | 34.34 | | | 30 | 19.8 | 34.57 | | 24.51 | 344 | 0.10 |
| 72 | - | 33.89 | | | 50 | 18.6 | 34.27 | | 24.58 | 336 | 0.17 |
| 96 | 12.49 | 34.07 | | 221 | 75 | 14.7 | 33.89 | | 25.20 | 278 | 0.25 |
| 147 | 11.22 | 34.23 | | 187 | 100 | 12.40 | 34.10 | | 25.83 | 217 | 0.31 |
| 190 | 10.07 | 34.31 | | 162 | 150 | 11.09 | 34.24 | | 26.19 | 184 | 0.41 |
| 276 | 9.40 | 34.45 | | 141 | 200 | 9.99 | 34.33 | | 26.45 | 159 | 0.50 |
| 365 | 8.48 | 34.49 | | 124 | 250 | 9.63 | 34.41 | | 26.57 | 147 | 0.58 |
| 451 | 7.72 | 34.49 | | 113 | 300 | 9.14 | 34.47 | | 26.70 | 135 | 0.65 |
| 541 | 6.84 | 34.49 | | 101 | 400 | 8.17 | 34.49 | | 26.87 | 119 | 0.79 |
| 720 | 5.42 | 34.47 | | 85 | 500 | 7.26 | 34.49 | | 27.00 | 107 | 0.91 |
| 902 | 4.54 | 34.47 | | 75 | 600 | 6.27 | 34.49 | | 27.14 | 94 | 1.01 |
| 1098 | 3.87 | 34.54 | | 63 | 700 | 5.54 | 34.47 | | 27.21 | 87 | 1.11 |
| | | | | | 800 | 5.00 | 34.47 | | 27.28 | 80 | 1.21 |
| | | | | | 1000 | 4.20 | 34.50 | | 27.39 | 70 | 1.37 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BLACK DOUGLAS; February 16, 1952; 0349 GCT; 24°05'N, 113°39.5'W; sounding, 1680 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 15°. 140.50

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.34 | | 0 | 19.5 | 34.34 | 24.41 | 353 | 0.00 |
| 9 | 19.55 | 34.54u | | 10 | 19.5 | 34.36 | 24.42 | 352 | 0.04 |
| 24 | - | 34.40 | | 20 | 19.5 | 34.39 | 24.45 | 349 | 0.07 |
| 48 | - | 34.45 | | 30 | 19.5 | 34.41 | 24.46 | 348 | 0.11 |
| 72 | - | 34.13 | | 50 | 19.3 | 34.45 | 24.54 | 340 | 0.17 |
| 96 | 14.19 | 33.66 | 284 | 75 | 16.7 | 33.92 | 24.78 | 318 | 0.26 |
| 147 | 11.07 | 33.93 | 206 | 100 | 13.90 | 33.66 | 25.19 | 278 | 0.33 |
| 192 | 11.16 | 34.52 | 164 | 150 | 11.08 | 33.97 | 25.98 | 204 | 0.45 |
| 282 | 10.04 | 34.56 | 143 | 200 | 11.12 | 34.53 | 26.41 | 163 | 0.55 |
| 376 | 8.46 | 34.49 | 123 | 250 | 10.58 | 34.55 | 26.52 | 152 | 0.63 |
| 468 | 7.52 | 34.49 | 110 | 300 | 9.72 | 34.55 | 26.67 | 138 | 0.70 |
| 563 | 6.56 | 34.49 | 97 | 400 | 8.19 | 34.48 | 26.86 | 120 | 0.84 |
| 750 | 5.39 | 34.49 | 83 | 500 | 7.19 | 34.49 | 27.01 | 106 | 0.96 |
| 938 | 4.48 | 34.56 | 68 | 600 | 6.29 | 34.49 | 27.13 | 94 | 1.07 |
| 1139 | 3.81 | 34.56 | 61 | 700 | 5.67 | 34.49 | 27.21 | 87 | 1.17 |
| | | | | 800 | 5.13 | 34.51 | 27.29 | 79 | 1.26 |
| | | | | 1000 | 4.22 | 34.56 | 27.43 | 65 | 1.42 |

BLACK DOUGLAS; February 15, 1952; 1144 GCT; 24°19'N, 111°48'W; sounding, 48 fm; wind, 010°, force 1; weather, clear; sea, moderate; wire angle, 00°. 143.26

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.16 | 34.54 | 355 | 0 | 20.16 | 34.54 | 24.39 | 355 | 0.00 |
| 10 | 20.19 | 34.60 | 351 | 10 | 20.19 | 34.60 | 24.43 | 351 | 0.04 |
| 25 | 20.15 | 34.54 | 355 | 20 | 20.17 | 34.55 | 24.39 | 354 | 0.07 |
| 50 | 17.67 | 34.25 | 316 | 30 | 20.15 | 34.54 | 24.39 | 355 | 0.11 |
| 75 | 15.00 | 34.22 | 260 | 50 | 17.67 | 34.25 | 24.80 | 316 | 0.17 |
| | | | | 75 | 15.00 | 34.22 | 25.39 | 260 | 0.25 |

BLACK DOUGLAS; February 15, 1952; 1425 GCT; 24°11'N, 112°03'W; sounding, 100 fm; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 03°. 143.30

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.92 | 34.42 | 358 | 0 | 19.92 | 34.42 | 24.36 | 358 | 0.00 |
| 11 | 19.93 | 34.45 | 356 | 10 | 19.93 | 34.45 | 24.38 | 356 | 0.04 |
| 21 | 19.93 | 34.40 | 359 | 20 | 19.93 | 34.40 | 24.34 | 359 | 0.07 |
| 30 | 19.92 | 34.38 | 360 | 30 | 19.92 | 34.38 | 24.33 | 360 | 0.11 |
| 49 | 19.90 | 34.41 | 358 | 50 | 19.90 | 34.41 | 24.36 | 358 | 0.18 |
| 72 | 17.92 | 34.29 | 319 | 75 | 17.50 | 34.27 | 24.85 | 311 | 0.26 |
| 95 | 13.76 | 34.13 | 241 | 100 | 13.56 | 34.15 | 25.64 | 236 | 0.33 |
| 118 | 13.02 | 34.43 | 205 | | | | | | |

BLACK DOUGLAS; February 15, 1952; 1814 GCT; 23°59'N, 112°18.5'W; sounding, 200 fm; wind, 010°, force 3; weather, partly cloudy; sea, rough; wire angle, 03°. 143.35

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.86 | 34.56 | 371 | 0 | 20.86 | 34.56 | 24.22 | 371 | 0.00 |
| 10 | 20.88 | 34.52 | 375 | 10 | 20.88 | 34.52 | 24.18 | 375 | 0.04 |
| 25 | 20.65 | 34.52 | 369 | 20 | 20.79 | 34.52 | 24.21 | 372 | 0.07 |
| 50 | 17.04 | 34.00 | 320 | 30 | 20.58 | 34.52 | 24.26 | 367 | 0.11 |
| 73 | 13.62 | 33.86 | 258 | 50 | 17.04 | 34.00 | 24.76 | 320 | 0.18 |
| 97 | 13.61 | 34.18 | 234 | 75 | 13.62 | 33.86 | 25.40 | 258 | 0.25 |
| 148 | 12.14 | 34.56 | 179 | 100 | 13.60 | 34.25 | 25.71 | 229 | 0.31 |
| 196 | 11.34 | 34.60 | 162 | 150 | 12.09 | 34.56 | 26.25 | 178 | 0.42 |
| 244 | 10.83 | 34.60 | 153 | 200 | 11.31 | 34.60 | 26.43 | 161 | 0.51 |
| 292 | 10.28 | 34.63 | 141 | 250 | 10.78 | 34.60 | 26.52 | 152 | 0.59 |
| | | | | 300 | (10.20) | (34.64) | (26.66) | (139) | (0.66) |

BLACK DOUGLAS; February 15, 1952; 0437 GCT; 23°56'N, 111°03.5'W; sounding, 70 fm; wind, 270°, force 1; weather, clear; sea, moderate; wire angle, 00°. 147.20

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.08 | 34.58 | 375 | 0 | 21.08 | 34.58 | 24.17 | 375 | 0.00 |
| 10 | 21.08 | 34.61 | 373 | 10 | 21.08 | 34.61 | 24.20 | 373 | 0.04 |
| 20 | 21.04 | 34.58 | 374 | 20 | 21.04 | 34.58 | 24.18 | 374 | 0.07 |
| 30 | 20.96 | 34.56 | 374 | 30 | 20.96 | 34.56 | 24.19 | 374 | 0.11 |
| 50 | 18.46 | 34.34 | 328 | 50 | 18.46 | 34.34 | 24.67 | 328 | 0.18 |
| 75 | - | 34.48 | | 75 | 16.2 | 34.48 | 25.32 | 266 | 0.26 |
| 100 | 15.34 | 34.51 | 245 | 100 | 15.34 | 34.51 | 25.54 | 245 | 0.32 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **147.25** | BLACK DOUGLAS; February 14, 1952; 2345 GCT; 23°47'N, 111°23'W; sounding, 48 fm; wind, 270°, force 2; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 21.18 | 34.54 | | 381 | 0 | 21.18 | 34.54 | | 24.12 | 381 | 0.00 |
| 10 | 20.85 | - | | | 10 | 20.85 | 34.54 | | 24.20 | 372 | 0.04 |
| 20 | 20.66 | 34.54 | | 368 | 20 | 20.66 | 34.54 | | 24.26 | 368 | 0.07 |
| 30 | 20.52 | 34.52 | | 365 | 30 | 20.52 | 34.52 | | 24.28 | 365 | 0.11 |
| 50 | 17.45 | 34.32 | | 306 | 50 | 17.45 | 34.32 | | 24.90 | 306 | 0.18 |
| 75 | 16.03 | 34.42 | | 267 | 75 | 16.03 | 34.42 | | 25.31 | 267 | 0.25 |
| **147.30** | BLACK DOUGLAS; February 14, 1952; 1757 GCT; 23°34'N, 111°44'W; sounding, 75 fm; wind, 330°, force 1; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 21.92 | 34.60 | | 396 | 0 | 21.92 | 34.60 | | 23.96 | 396 | 0.00 |
| 10 | - | 34.60 | | | 10 | 21.9 | 34.60 | | 23.96 | 396 | 0.04 |
| 21 | 21.88 | 34.58 | | 396 | 20 | 21.88 | 34.58 | | 23.95 | 396 | 0.08 |
| 30 | 21.86 | 34.57 | | 397 | 30 | 21.86 | 34.57 | | 23.95 | 397 | 0.12 |
| 50 | 21.74 | 34.61 | | 391 | 50 | 21.74 | 34.61 | | 24.01 | 391 | 0.20 |
| 75 | - | 34.43 | | | 75 | 19.9 | 34.43 | | 24.37 | 356 | 0.29 |
| **150.19** | BLACK DOUGLAS; February 13, 1952; 1951 GCT; 23°25'N, 110°40.5'W; sounding, 100 fm; wind, 030°, force 3; weather, cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 21.72 | 34.60 | | 391 | 0 | 21.72 | 34.60 | | 24.01 | 391 | 0.00 |
| 10 | - | 34.60 | | | 10 | 21.7 | 34.60 | | 24.02 | 390 | 0.04 |
| 25 | 21.19 | 34.58 | | 378 | 20 | 21.30 | 34.59 | | 24.12 | 380 | 0.08 |
| 48 | 17.45 | 34.33 | | 305 | 30 | 21.07 | 34.55 | | 24.15 | 377 | 0.12 |
| 71 | 14.84 | 34.45 | | 239 | 50 | 17.00 | 34.33 | | 25.02 | 295 | 0.18 |
| 94 | 13.92 | 34.60 | | 210 | 75 | 14.69 | 34.50 | | 25.67 | 233 | 0.25 |
| 117 | 13.57 | 34.63 | | 201 | 100 | 13.81 | 34.61 | | 25.94 | 207 | 0.31 |
| 146 | 12.81 | 34.67 | | 183 | 150 | (12.70) | (34.67) | | (26.22) | (181) | (0.40) |
| **150.25** | BLACK DOUGLAS; February 13, 1952; 2327 GCT; 23°11'N, 111°03'W; sounding, 600 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | - | 34.60 | | | 0 | 21.4 | 34.60 | | 24.10 | 382 | 0.00 |
| 10 | 21.19 | 34.60 | | 377 | 10 | 21.19 | 34.60 | | 24.16 | 377 | 0.04 |
| 25 | - | 34.60 | | | 20 | 21.1 | 34.60 | | 24.18 | 375 | 0.08 |
| 50 | - | 34.60 | | | 30 | 21.0 | 34.60 | | 24.21 | 372 | 0.11 |
| 74 | - | 34.40 | | | 50 | 20.4 | 34.60 | | 24.37 | 357 | 0.19 |
| 99 | 14.54 | 34.31 | | 243 | 75 | 16.8 | 34.40 | | 25.12 | 285 | 0.27 |
| 151 | 12.66 | 34.65 | | 182 | 100 | 14.50 | 34.31 | | 25.57 | 243 | 0.33 |
| 195 | 12.08 | 34.67 | | 170 | 150 | 12.68 | 34.65 | | 26.20 | 182 | 0.44 |
| 286 | 10.84 | 34.65 | | 149 | 200 | 12.01 | 34.67 | | 26.35 | 168 | 0.53 |
| 377 | 9.32 | 34.60 | | 128 | 250 | 11.30 | 34.67 | | 26.48 | 156 | 0.61 |
| 478 | 7.85 | 34.47 | | 116 | 300 | 10.65 | 34.65 | | 26.59 | 146 | 0.69 |
| 549 | 7.06 | 34.49 | | 104 | 400 | 8.91 | 34.57 | | 26.82 | 124 | 0.84 |
| 660 | 5.86 | 34.40 | | 95 | 500 | 7.59 | 34.48 | | 26.95 | 112 | 0.96 |
| 759 | 5.33 | 34.43 | | 87 | 600 | 6.43 | 34.44 | | 27.08 | 99 | 1.08 |
| 954 | 4.40 | 34.65 | | 61 | 700 | 5.64 | 34.41 | | 27.15 | 92 | 1.18 |
| | | | | | 800 | 5.14 | | | | | |
| | | | | | 1000 | (4.22) | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BLACK DOUGLAS; February 14, 1952; 0315 GCT; 23°02'N, 111°20'W; sounding, 1480 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 19°. 150.30

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.51 | | 0 | 23.2 | 34.51 | 23.53 | 437 | 0.00 |
| 10 | 23.12 | 34.49 | 436 | 10 | 23.12 | 34.49 | 23.53 | 436 | 0.04 |
| 25 | - | 34.51 | | 20 | 23.1 | 34.50 | 23.55 | 435 | 0.09 |
| 48 | - | 34.51 | | 30 | 23.1 | 34.51 | 23.55 | 434 | 0.13 |
| 72 | - | 34.20 | | 50 | 22.4 | 34.51 | 23.75 | 415 | 0.22 |
| 95 | 15.39 | 34.43 | 252 | 75 | 16.9 | 34.20 | 24.94 | 302 | 0.31 |
| 145 | 12.47 | 34.48 | 191 | 100 | 14.00 | 34.44 | 25.77 | 223 | 0.37 |
| 189 | 11.84 | 34.61 | 170 | 150 | 12.38 | 34.49 | 26.14 | 188 | 0.48 |
| 273 | 10.67 | 34.64 | 147 | 200 | 11.69 | 34.62 | 26.37 | 166 | 0.57 |
| 364 | 9.31 | 34.60 | 128 | 250 | 11.02 | 34.64 | 26.51 | 153 | 0.65 |
| 450 | 8.09 | 34.52 | 116 | 300 | 10.31 | 34.64 | 26.64 | 141 | 0.73 |
| 540 | 7.05 | 34.51 | 102 | 400 | 8.76 | 34.56 | 26.83 | 123 | 0.87 |
| 720 | 5.52 | 34.51 | 83 | 500 | 7.49 | 34.51 | 26.98 | 108 | 0.99 |
| 901 | 4.60 | 34.51 | 73 | 600 | 6.44 | 34.51 | 27.13 | 94 | 1.10 |
| 1098 | 3.93 | 34.54 | 64 | 700 | 5.67 | 34.51 | 27.23 | 85 | 1.20 |
| | | | | 800 | 5.08 | 34.51 | 27.30 | 78 | 1.29 |
| | | | | 1000 | 4.25 | 34.52 | 27.40 | 69 | 1.45 |

BLACK DOUGLAS; February 14, 1952; 0923 GCT; 22°42'N, 111°57.5'W; sounding, 1900 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 14°. 150.40

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.54 | | 0 | 22.2 | 34.54 | 23.83 | 408 | 0.00 |
| 9 | 22.18 | 34.54 | 407 | 10 | 22.2 | 34.54 | 23.83 | 408 | 0.04 |
| 24 | - | 34.52 | | 20 | 22.2 | 34.53 | 23.83 | 409 | 0.08 |
| 48 | - | 34.20 | | 30 | 22.1 | 34.48 | 23.82 | 410 | 0.12 |
| 72 | - | 34.23 | | 50 | 18.1 | 34.20 | 24.65 | 330 | 0.20 |
| 97 | 13.85 | 34.18 | 239 | 75 | 14.7 | 34.23 | 25.46 | 253 | 0.27 |
| 148 | 12.60 | 34.63 | 182 | 100 | 13.70 | 34.18 | 25.64 | 236 | 0.33 |
| 192 | 11.76 | 34.69 | 162 | 150 | 12.54 | 34.63 | 26.22 | 181 | 0.44 |
| 279 | 10.70 | 34.69 | 144 | 200 | 11.67 | 34.69 | 26.43 | 161 | 0.53 |
| 369 | 9.08 | 34.58 | 126 | 250 | 11.11 | 34.69 | 26.53 | 151 | 0.61 |
| 455 | 7.71 | - | | 300 | 10.38 | 34.67 | 26.65 | 140 | 0.68 |
| 544 | 6.76 | 34.47 | 101 | 400 | 8.52 | 34.57 | 26.88 | 118 | 0.82 |
| 723 | 5.47 | 34.51 | 83 | 500 | 7.21 | 34.49 | 27.01 | 106 | 0.94 |
| 907 | 4.67 | 34.54 | 72 | 600 | 6.26 | 34.48 | 27.13 | 94 | 1.05 |
| 1102 | 3.96 | 34.56 | 63 | 700 | 5.59 | 34.50 | 27.23 | 85 | 1.14 |
| | | | | 800 | 5.11 | 34.53 | 27.31 | 77 | 1.23 |
| | | | | 1000 | 4.31 | 34.54 | 27.41 | 68 | 1.40 |

SIO

CCOFI
5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | $\Delta D$<br>dyn m |
| **80.51** | HORIZON; March 5, 1952; 1923 GCT; 34°26'N, 120°33.5'W; sounding, 50 fm; wind, 310°, force 5; weather, partly cloudy; sea, moderate; wire angle, 19°.[a] | | | | | | | | | | |
| 0 | 10.88 | 33.49 | 5.09 | 236 | 0 | 10.88 | 33.49 | 5.09 | 25.64 | 236 | 0.00 |
| 10 | - | 33.51 | 4.98 | | 10 | (10.69) | 33.51 | 4.98 | (25.69) | (231) | (0.02) |
| 19 | 10.48 | 33.58 | 4.65 | 222 | 20 | (10.44) | 33.58 | 4.63 | (25.79) | (222) | (0.05) |
| 28 | - | 33.57 | 4.50 | | 30 | (10.17) | 33.57 | 4.42 | (25.83) | (218) | (0.07) |
| 48 | - | 33.73 | 3.14 | | 50 | (9.68) | 33.75 | 3.00 | (26.05) | (197) | (0.11) |
| 72 | 9.26 | 33.93 | 2.49 | 177 | | | | | | | |
| **80.55** | HORIZON; March 5, 1952; 2253 GCT; 34°18.5'N, 120°48'W; sounding, 400 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | |
| 0 | - | 33.21 | 6.08 | | 0 | 12.5 | 33.21 | 6.08 | 25.13 | 285 | 0.00 |
| 10 | 12.45 | 33.22 | 6.13 | 283 | 10 | 12.45 | 33.22 | 6.13 | 25.14 | 283 | 0.03 |
| 25 | - | 33.21 | 6.08 | | 20 | 12.5 | 33.21 | 6.09 | 25.13 | 285 | 0.06 |
| 49 | - | 33.21 | 6.07 | | 30 | 12.5 | 33.21 | 6.08 | 25.13 | 285 | 0.09 |
| 73 | - | 33.44 | 4.85 | | 50 | 12.5 | 33.21 | 6.05 | 25.13 | 285 | 0.14 |
| 97 | 9.44 | 33.48 | 4.04 | 213 | 75 | 11.4 | 33.45 | 4.75 | 25.52 | 247 | 0.21 |
| 149 | 8.68 | 33.82 | 3.20 | 176 | 100 | 9.40 | 33.49 | 3.98 | 25.89 | 212 | 0.27 |
| 194 | 8.36 | 33.96 | 2.81 | 161 | 150 | 8.67 | 33.83 | 3.19 | 26.28 | 175 | 0.37 |
| 240 | 7.75 | 34.07 | 2.56 | 144 | 200 | 8.32 | 33.98 | 2.79 | 26.45 | 159 | 0.45 |
| 286 | 7.44 | 34.11 | 2.04 | 137 | 250 | 7.66 | 34.08 | 2.48 | 26.62 | 142 | 0.53 |
| 337 | 7.31 | 34.18 | 1.42 | 130 | 300 | 7.41 | 34.13 | 3.84 | 26.70 | 135 | 0.60 |
| 385 | 6.82 | 34.18 | 1.01 | 124 | 400 | 6.66 | 34.19 | 0.91 | 26.85 | 121 | 0.73 |
| 432 | 6.41 | 34.22 | 0.75 | 116 | 500 | 6.14 | 34.24 | 0.59 | 26.96 | 111 | 0.86 |
| 480 | 6.22 | 34.23 | 0.62 | 113 | 600 | (5.57) | (34.30) | | (27.07) | (100) | (0.97) |
| 583 | 5.64 | 34.29 | 0.44 | 101 | | | | | | | |
| **80.60** | HORIZON; March 6, 1952; 0214 GCT; 34°09'N, 121°09'W; sounding, 1010 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 20°. | | | | | | | | | | |
| 0 | - | 33.13 | 6.14 | | 0 | 12.4 | 33.13 | 6.14 | 25.08 | 289 | 0.00 |
| 9 | 12.38 | 33.13 | 6.16 | 288 | 10 | 12.4 | 33.13 | 6.16 | 25.08 | 289 | 0.03 |
| 24 | - | 33.13 | 6.19 | | 20 | 12.4 | 33.13 | 6.18 | 25.08 | 289 | 0.06 |
| 47 | - | 33.15 | 6.11 | | 30 | 12.4 | 33.13 | 6.18 | 25.08 | 289 | 0.09 |
| 70 | - | 33.15 | 5.96 | | 50 | 12.4 | 33.15 | 6.12 | 25.10 | 287 | 0.14 |
| 93 | 9.48 | 33.12 | 5.14 | 240 | 75 | 10.3 | 33.14 | 5.87 | 25.47 | 252 | 0.21 |
| 141 | 8.56 | 33.64 | 3.77 | 188 | 100 | 9.20 | 33.13 | 4.80 | 25.64 | 235 | 0.27 |
| 225 | 7.87 | 34.02 | 2.56 | 150 | 150 | 8.48 | 33.73 | 3.66 | 26.23 | 180 | 0.38 |
| 267 | 7.54 | 34.04 | 1.96 | 144 | 200 | 8.07 | 33.98 | 3.03 | 26.48 | 156 | 0.46 |
| 356 | 6.68 | 34.14 | 1.28 | 125 | 250 | 7.69 | 34.03 | 2.15 | 26.58 | 147 | 0.54 |
| 440 | 5.90 | 34.14 | 0.91 | 115 | 300 | 7.23 | 34.08 | 1.66 | 26.68 | 137 | 0.61 |
| 529 | 5.37 | 34.22 | 0.52 | 103 | 400 | 6.26 | 34.14 | 1.08 | 26.86 | 120 | 0.75 |
| 709 | 4.74 | 34.36 | 0.32 | 86 | 500 | 5.51 | 34.19 | 0.64 | 27.00 | 107 | 0.87 |
| 893 | 4.19 | 34.43 | 0.40 | 75 | 600 | 5.09 | 34.29 | 0.41 | 27.12 | 95 | 0.97 |
| 1090 | 3.62 | 34.51 | 0.64 | 63 | 700 | 4.77 | 34.36 | 0.33 | 27.22 | 86 | 1.07 |
| | | | | | 800 | 4.47 | 34.39 | 0.35 | 27.27 | 81 | 1.16 |
| | | | | | 1000 | 3.88 | 34.47 | 0.50 | 27.40 | 69 | 1.33 |

a) The E. W. Scripps occupied hydrographic stations during a special upwelling study in March. These stations appear on page 97 following the regular stations of Cruise 5203.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| HORIZON; March 6, 1952; 0822 GCT; 33°46'N, 121°50'W; sounding, 2100 fm; wind, 240°, force 2; weather, partly cloudy; sea, rough; wire angle, 25°. | | | | | | | | | | | 80.70 |
| 0 | - | 32.97 | 6.15 | | 0 | 12.3 | 32.97 | 6.15 | 24.98 | 299 | 0.00 |
| 9 | 12.27 | 32.97 | 6.16 | 298 | 10 | 12.3 | 32.97 | 6.16 | 24.98 | 299 | 0.03 |
| 23 | - | 32.97 | 6.17 | | 20 | 12.3 | 32.97 | 6.16 | 24.98 | 299 | 0.06 |
| 50 | - | 32.97 | 6.16 | | 30 | 12.3 | 32.97 | 6.17 | 24.98 | 299 | 0.09 |
| 73 | - | 33.30 | 6.00 | | 50 | 12.0 | 32.97 | 6.15 | 25.03 | 293 | 0.15 |
| 99 | 11.50 | 33.39 | 4.76 | 254 | 75 | 12.3 | 33.31 | 5.96 | 25.24 | 274 | 0.22 |
| 147 | 9.56 | 33.73 | 3.23 | 196 | 100 | 11.50 | 33.40 | 4.71 | 25.46 | 253 | 0.29 |
| 240 | 8.34 | 34.13 | 2.18 | 148 | 150 | 9.50 | 33.76 | 3.18 | 26.09 | 193 | 0.40 |
| 281 | 7.92 | 34.18 | 1.69 | 139 | 200 | 8.70 | 34.04 | 2.60 | 26.43 | 160 | 0.49 |
| 374 | 6.90 | 34.22 | 0.99 | 122 | 250 | 8.27 | 34.14 | 2.02 | 26.58 | 147 | 0.57 |
| 465 | 6.33 | 34.31 | 0.41 | 108 | 300 | 7.68 | 34.19 | 1.52 | 26.71 | 135 | 0.64 |
| 555 | 5.78 | 34.36 | 0.27 | 98 | 400 | 6.72 | 34.24 | 0.78 | 26.88 | 118 | 0.77 |
| 735 | 4.78 | 34.36 | 0.31 | 86 | 500 | 6.13 | 34.34 | 0.33 | 27.04 | 103 | 0.89 |
| 925 | 4.12 | 34.45 | 0.47 | 73 | 600 | 5.50 | 34.36 | 0.27 | 27.13 | 94 | 1.00 |
| 1120 | 3.62 | 34.51 | 0.68 | 63 | 700 | 4.94 | 34.36 | 0.30 | 27.20 | 88 | 1.09 |
| | | | | | 800 | 4.51 | 34.38 | 0.36 | 27.26 | 82 | 1.19 |
| | | | | | 1000 | 3.93 | 34.48 | 0.54 | 27.40 | 69 | 1.35 |
| HORIZON; March 6, 1952; 1431 GCT; 33°25'N, 122°33.5'W; sounding, 2100 fm; wind, 210°, force 6; weather, cloudy; sea, rough; wire angle, 34°. | | | | | | | | | | | 80.80 |
| 0 | - | 33.21 | 6.06 | | 0 | 13.0 | 33.21 | 6.06 | 25.03 | 294 | 0.00 |
| 8 | 13.03 | 33.21 | 6.10 | 295 | 10 | 13.0 | 33.21 | 6.11 | 25.03 | 294 | 0.03 |
| 21 | - | 33.22 | 6.13 | | 20 | 13.0 | 33.22 | 6.13 | 25.04 | 293 | 0.06 |
| 46 | - | 33.30 | 6.08 | | 30 | 13.0 | 33.24 | 6.13 | 25.05 | 292 | 0.09 |
| 66 | - | 33.33 | 5.34 | | 50 | 12.7 | 33.31 | 6.02 | 25.16 | 281 | 0.15 |
| 89 | 10.72 | 33.40 | 4.29 | 240 | 75 | 11.5 | 33.35 | 4.81 | 25.42 | 257 | 0.21 |
| 133 | 9.38 | 33.77 | 3.09 | 191 | 100 | 10.30 | 33.46 | 3.94 | 25.72 | 228 | 0.27 |
| 222 | 8.20 | 34.12 | 1.95 | 147 | 150 | 9.08 | 33.98 | 2.71 | 26.33 | 170 | 0.38 |
| | | | | | 200 | 8.35 | 34.11 | 2.07 | 26.54 | 150 | 0.46 |
| HORIZON; March 7, 1952; 0236 GCT; 32°44'N, 123°52'W; sounding, 2100 fm; wind, 250°, force 6; weather, intermittent heavy rain; sea, rough; wire angle, 44°. | | | | | | | | | | | 80.100 |
| 0 | - | 32.95 | 6.09 | | 0 | 12.7 | 32.95 | 6.09 | 24.89 | 308 | 0.00 |
| 7 | 12.69 | 32.95 | 6.09 | 307 | 10 | (12.70) | 32.95 | 6.10 | (24.89) | (308) | (0.03) |
| 22 | - | 32.94 | 6.10 | | 20 | (12.70) | 32.94 | 6.10 | (24.88) | (308) | (0.06) |
| 43 | - | 32.97 | 6.08 | | 30 | (12.70) | 32.95 | 6.09 | (24.89) | (308) | (0.09) |
| 64 | - | 32.95 | 6.08 | | 50 | (12.70) | 32.96 | 6.08 | (24.89) | (307) | (0.15) |
| 82 | 12.72 | 33.26 | 6.09 | 285 | 75 | (12.70) | 33.00 | 6.08 | (24.92) | (304) | (0.23) |
| 119 | 10.56 | 33.30 | 4.62 | 244 | 100 | 11.70 | 33.29 | 5.35 | 25.34 | 264 | (0.30) |
| 192 | 8.53 | 33.94 | 2.90 | 165 | 150 | 9.47 | 33.77 | 3.81 | 26.10 | 192 | (0.42) |
| | | | | | 200 | (8.41) | (33.95) | (2.82) | (26.41) | (163) | (0.51) |
| HORIZON; March 8, 1952; 1016 GCT; 34°01'N, 118°58'W; sounding, 210 fm; wind, 080°, force 3; weather, overcast; sea, slight; wire angle, estimated 11°. | | | | | | | | | | | 85.38 |
| 0 | 12.50 | 33.24 | 6.44 | 283 | 0 | 12.50 | 33.24 | 6.44 | 25.15 | 283 | 0.00 |
| 10 | 12.45 | 33.22 | 6.20 | 283 | 10 | 12.45 | 33.22 | 6.20 | 25.14 | 283 | 0.03 |
| 24 | 12.01 | 33.31 | 5.69 | 268 | 20 | 12.11 | 33.29 | 5.80 | 25.26 | 272 | 0.06 |
| 48 | 11.38 | 33.35 | 4.90 | 254 | 30 | 11.90 | 33.32 | 5.43 | 25.32 | 266 | 0.08 |
| 71 | 10.68 | 33.44 | 4.24 | 236 | 50 | 11.32 | 33.36 | 4.78 | 25.46 | 253 | 0.14 |
| 93 | 10.22 | 33.53 | 3.60 | 222 | 75 | 10.55 | 33.46 | 4.01 | 25.68 | 232 | 0.20 |
| 143 | 9.76 | 33.77 | 3.08 | 197 | 100 | 10.14 | 33.57 | 3.53 | 25.83 | 217 | 0.25 |
| 189 | 9.00 | 34.00 | 2.20 | 168 | 150 | 9.69 | 33.82 | 2.94 | 26.10 | 192 | 0.36 |
| 237 | 8.55 | 34.07 | 1.88 | 156 | 200 | 8.88 | 34.02 | 2.08 | 26.39 | 164 | 0.45 |
| 285 | 8.06 | 34.14 | 1.45 | 144 | 250 | 8.43 | 34.09 | 1.76 | 26.52 | 153 | 0.53 |
| | | | | | 300 | (7.90) | (34.16) | | (26.65) | (140) | (0.60) |

SIO

CCOFI 5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **85.40** | HORIZON; March 8, 1952; 0823 GCT; 33°57.5'N, 119°11'W; sounding, 400 fm; wind, 080°, force 4; weather, cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | - | 33.24 | 6.10 | | 0 | 12.9 | 33.24 | 6.10 | 25.07 | 290 | 0.00 |
| 10 | 12.72 | 33.26 | 6.17 | 285 | 10 | 12.72 | 33.26 | 6.17 | 25.12 | 285 | 0.03 |
| 24 | - | 33.28 | 5.88 | | 20 | 12.6 | 33.28 | 5.99 | 25.16 | 281 | 0.06 |
| 48 | - | 33.28 | 5.37 | | 30 | 12.4 | 33.28 | 5.72 | 25.20 | 278 | 0.09 |
| 72 | - | 33.39 | 4.51 | | 50 | 12.0 | 33.28 | 5.31 | 25.27 | 271 | 0.14 |
| 95 | 9.96 | 33.64 | 3.54 | 209 | 75 | 10.3 | 33.43 | 4.50 | 25.70 | 230 | 0.20 |
| 144 | 9.55 | 33.98 | 2.61 | 178 | 100 | 9.90 | 33.69 | 3.40 | 25.97 | 205 | 0.26 |
| 188 | 9.1 a) | 34.09 | 2.16 | 163 | 150 | 9.49 | 34.00 | 2.54 | 26.28 | 175 | 0.35 |
| 232 | 8.55 | 34.16 | 2.00 | 149 | 200 | 8.90 | 34.11 | 2.08 | 26.46 | 158 | 0.44 |
| 276 | 8.07 | 34.18 | 1.41 | 141 | 250 | 8.34 | 34.17 | 1.87 | 26.59 | 145 | 0.52 |
| 326 | 7.64 | 34.20 | 1.12 | 133 | 300 | 7.85 | 34.18 | 1.24 | 26.67 | 138 | 0.59 |
| 371 | 7.37 | 34.27 | 0.98 | 124 | 400 | 7.22 | 34.29 | 0.84 | 26.85 | 121 | 0.73 |
| 463 | 6.80 | 34.30 | 0.59 | 115 | 500 | 6.52 | 34.31 | 0.49 | 26.96 | 110 | 0.85 |
| 563 | 6.03 | 34.34 | 0.35 | 102 | 600 | 5.78 | 34.35 | 0.26 | 27.09 | 98 | 0.96 |
| 661 | 5.39 | 34.35 | 0.18 | 94 | 700 | (5.17) | (34.35) | | (27.16) | (91) | (1.06) |
| **85.50** | HORIZON; March 8, 1952; 0318 GCT; 33°36.5'N, 119°52'W; sounding, 80 fm; wind, 290°, force 3; weather, partly cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 12.41 | 33.31 | 6.14 | 276 | 0 | 12.41 | 33.31 | 6.14 | 25.22 | 276 | 0.00 |
| 9 | 12.42 | 33.26 | 6.16 | 280 | 10 | 12.42 | 33.26 | 6.16 | 25.18 | 280 | 0.03 |
| 19 | 12.21 | 33.28 | 6.07 | 274 | 20 | 12.21 | 33.28 | 6.06 | 25.24 | 274 | 0.06 |
| 28 | 12.19 | 33.30 | 6.02 | 272 | 30 | 12.19 | 33.30 | 6.02 | 25.25 | 272 | 0.08 |
| 47 | 11.65 | 33.37 | 5.30 | 258 | 50 | 11.50 | 33.39 | 5.01 | 25.45 | 254 | 0.14 |
| 70 | 10.32 | 33.46 | 4.00 | 228 | 75 | 10.15 | 33.50 | 3.75 | 25.78 | 223 | 0.20 |
| 94 | 9.64 | 33.83b) | 2.99 | 190 | 100 | 9.49 | 33.86 | 2.79 | 26.17 | 186 | 0.25 |
| 117 | 9.12 | 33.93 | 2.20 | 175 | | | | | | | |
| **85.60** | HORIZON; March 7, 1952; 2200 GCT; 33°17'N, 120°33'W; sounding, 630 fm; wind, 290°, force 3; weather, partly cloudy; sea, high; wire angle, 29°. | | | | | | | | | | |
| 0 | - | 33.13 | 6.01 | | 0 | 13.7 | 33.13 | 6.01 | 24.83 | 313 | 0.00 |
| 9 | 13.40 | 33.12 | 6.08 | 308 | 10 | 13.4 | 33.12 | 6.06 | 24.88 | 308 | 0.03 |
| 22 | - | 33.12 | 6.00 | | 20 | 13.4 | 33.12 | 6.01 | 24.88 | 308 | 0.06 |
| 44 | - | 33.26 | 6.03 | | 30 | 13.4 | 33.17 | 6.01 | 24.92 | 305 | 0.09 |
| 65 | - | 33.26 | 5.55 | | 50 | 12.7 | 33.26 | 6.02 | 25.13 | 285 | 0.15 |
| 86 | 10.11 | 33.35 | 4.41 | 233 | 75 | 10.6 | 33.28 | 4.80 | 25.53 | 246 | 0.22 |
| 130 | 8.80 | 33.69 | 3.77 | 188 | 100 | 9.30 | 33.48 | 4.19 | 25.90 | 211 | 0.28 |
| 171 | 8.51 | 34.00 | 2.60 | 160 | 150 | 8.68 | 33.86 | 3.19 | 26.30 | 173 | 0.37 |
| 253 | 7.68 | 34.16 | 1.56 | 137 | 200 | 8.23 | 34.10 | 2.10 | 26.55 | 149 | 0.46 |
| 341 | 6.79 | 34.15 | 1.07 | 126 | 250 | 7.73 | 34.16 | 1.58 | 26.68 | 137 | 0.53 |
| 426 | 6.57 | 34.18 | 0.70 | 121 | 300 | 7.17 | 34.15 | 1.29 | 26.75 | 131 | 0.60 |
| 518 | 5.66 | 34.22 | 0.41 | 107 | 400 | 6.62 | 34.17 | 0.74 | 26.84 | 122 | 0.73 |
| 607 | 5.23 | 34.25 | 0.35 | 99 | 500 | 5.80 | 34.22 | 0.43 | 26.98 | 108 | 0.85 |
| 703 | 4.90 | 34.34 | 0.35 | 89 | 600 | 5.25 | 34.25 | 0.33 | 27.07 | 100 | 0.96 |
| 894 | 4.23 | 34.51 | 0.41 | 69 | 700 | 4.92 | 34.34 | 0.35 | 27.18 | 89 | 1.06 |
| | | | | | 800 | 4.56 | 34.44 | 0.38 | 27.30 | 78 | 1.15 |
| | | | | | 1000 | (3.84) | (34.54) | | (27.46) | (63) | (1.31) |
| **85.70** | HORIZON; March 7, 1952; 1530 GCT; 32°57'N, 121°14'W; sounding, 2200 fm; wind, 300°, force 5; weather, cloudy; sea, very rough; wire angle, 20°. | | | | | | | | | | |
| 0 | - | 33.15 | 6.05 | | 0 | 12.5 | 33.15 | 6.05 | 25.08 | 289 | 0.00 |
| 9 | 12.47 | 33.15 | 6.06 | 289 | 10 | 12.4 | 33.15 | 6.05 | 25.10 | 287 | 0.03 |
| 28 | - | 33.21 | 6.09 | | 20 | 12.4 | 33.20 | 6.07 | 25.14 | 284 | 0.06 |
| 56 | - | 33.19 | 6.01 | | 30 | 12.4 | 33.21 | 6.08 | 25.14 | 283 | 0.09 |
| 85 | - | 33.30 | 5.23 | | 50 | 12.4 | 33.19 | 6.03 | 25.13 | 284 | 0.14 |
| 112 | 9.98 | 33.57 | 3.86 | 215 | 75 | 12.1 | 33.24 | 5.71 | 25.23 | 275 | 0.21 |
| 165 | 8.58 | 33.86 | 2.97 | 172 | 100 | 10.6 | 33.44 | 4.31 | 25.65 | 235 | 0.28 |
| 268 | 7.64 | 34.14 | 1.63 | 138 | 150 | 8.65 | 33.79 | 3.11 | 26.25 | 178 | 0.38 |
| | | | | | 200 | 8.55 | 33.99 | 2.79 | 26.42 | 162 | 0.47 |
| | | | | | 250 | 7.80 | 34.12 | 1.83 | 26.63 | 141 | 0.55 |

a) Temperature inferred from pressure thermometer and wire depth.

b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

PAOLINA-T; March 6, 1952; 0511 GCT; 33°24.5'N, 118°49'W; sounding, 780 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 03°. 88.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - a) | 33.28 | | | 0 | 13.0 | 33.28 | | 25.08 | 289 | 0.00 |
| 10 | 12.98 | 33.28 | | 288 | 10 | 12.98 | 33.28 | | 25.09 | 288 | 0.03 |
| 25 | - | 33.26 | | | 20 | (12.90) | 33.26 | | (25.09) | (288) | (0.06) |
| 50 | - | 33.28 | | | 30 | (12.80) | 33.26 | | (25.11) | (287) | (0.09) |
| 75 | - | 33.46 | | | 50 | (11.30) | 33.28 | | (25.40) | (258) | (0.14) |
| 100 | - | 33.62 | | | 75 | (9.90) | 33.46 | | (25.79) | (222) | (0.20) |
| 154 | 8.54 | 33.96 | | 164 | 100 | (9.30) | 33.62 | | (26.01) | (200) | (0.25) |
| 204 | 8.28 | 34.09 | | 150 | 150 | (8.60) | 33.94 | | (26.37) | (166) | (0.35) |
| 253 | 7.96 | 34.14 | | 142 | 200 | 8.31 | 34.08 | | 26.53 | 152 | (0.43) |
| 303 | 7.75 | 34.16 | | 138 | 250 | 7.98 | 34.14 | | 26.62 | 142 | (0.50) |
| 408 | 6.96 | 34.22 | | 123 | 300 | 7.77 | 34.16 | | 26.67 | 138 | (0.58) |
| 507 | 6.21 | 34.26 | | 110 | 400 | 7.02 | 34.21 | | 26.82 | 124 | (0.71) |
| 611 | 5.67 | - | | | 500 | 6.27 | 34.26 | | 26.96 | 111 | (0.84) |
| | | | | | 600 | 5.72 | | | | | |

HORIZON; March 8, 1952; 1950 GCT; 33°30'N, 117°46.5'W; sounding, 30 fm; wind, 090°, force 3; weather, cloudy; sea, slight; wire angle, 02°. 90.28

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.41 | 33.15 | 6.11 | 306 | 0 | 13.41 | 33.15 | 6.11 | 24.90 | 306 | 0.00 |
| 10 | 13.30 | 33.15 | 6.13 | 304 | 10 | 13.30 | 33.15 | 6.13 | 24.92 | 304 | 0.03 |
| 20 | 13.39 | 33.24 | 6.03 | 299 | 20 | 13.39 | 33.24 | 6.03 | 24.97 | 299 | 0.06 |
| 30 | 13.31 | 33.24 | 6.02 | 298 | 30 | 13.31 | 33.24 | 6.02 | 24.99 | 298 | 0.09 |

HORIZON; March 8, 1952; 2127 GCT; 33°24.5'N, 117°55.5'W; sounding, 340 fm; wind, 170°, force 3; weather, cloudy; sea, slight; wire angle, 04°. 90.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.26 | 5.99 | | 0 | 14.0 | 33.26 | 5.99 | 24.86 | 310 | 0.00 |
| 10 | 13.88 | 33.22 | 5.99 | 310 | 10 | 13.88 | 33.22 | 5.99 | 24.86 | 310 | 0.03 |
| 25 | - | 33.24 | 6.16 | | 20 | 13.8 | 33.24 | 6.12 | 24.89 | 307 | 0.06 |
| 50 | - | 33.24 | 5.95 | | 30 | 13.8 | 33.24 | 6.13 | 24.89 | 307 | 0.09 |
| 74 | 10.96 | 33.26 | 4.90 | 254 | 50 | 13.1 | 33.24 | 5.95 | 25.03 | 294 | 0.15 |
| 98 | 10.30 | 33.58 | 3.72 | 219 | 75 | 10.94 | 33.26 | 4.90 | 25.45 | 254 | 0.22 |
| 150 | 9.18 | 33.89 | 3.10 | 179 | 100 | 10.00 | 33.59 | 3.70 | 25.87 | 214 | 0.28 |
| 196 | 9.20 | 34.14b) | 2.14 | 160 | 150 | 9.18 | 33.89 | 3.10 | 26.24 | 179 | 0.38 |
| 241 | 8.68 | 34.16 | 1.86 | 151 | 200 | 9.20 | 34.14 | 2.09 | 26.43 | 160 | 0.47 |
| 288 | 8.30 | 34.20 | 1.50 | 143 | 250 | 8.60 | 34.16 | 1.80 | 26.54 | 150 | 0.55 |
| 338 | 7.86 | 34.27 | 1.00 | 131 | 300 | 8.22 | 34.23 | 1.34 | 26.66 | 139 | 0.62 |
| 384 | 7.25 | 34.27 | 0.84 | 123 | 400 | 7.11 | 34.27 | 0.79 | 26.85 | 121 | 0.76 |
| 431 | 6.92 | 34.27 | 0.67 | 118 | 500 | (6.36) | (34.27) | (0.45) | (26.95) | (111) | (0.88) |
| 480 | 6.56 | 34.27 | 0.50 | 114 | | | | | | | |

HORIZON; March 9, 1952; 0102 GCT; 33°11'N, 118°23.5'W; sounding, 650 fm; wind, 110°, force 2; weather, cloudy; sea, rough; wire angle, 02°. 90.37

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.26 | 6.06 | | 0 | 13.7 | 33.26 | 6.06 | 24.93 | 304 | 0.00 |
| 10 | 13.60 | 33.26 | 6.09 | 302 | 10 | 13.60 | 33.26 | 6.09 | 24.95 | 302 | 0.03 |
| 26 | - | 33.27 | 6.11 | | 20 | 13.5 | 33.26 | 6.11 | 24.97 | 300 | 0.06 |
| 50 | - | 33.26 | 5.02 | | 30 | 13.5 | 33.27 | 6.11 | 24.97 | 299 | 0.09 |
| 74 | - | 33.48 | 4.20 | | 50 | 11.2 | 33.26 | 5.02 | 25.41 | 258 | 0.15 |
| 99 | 9.92 | 33.68 | 3.56 | 206 | 75 | 10.1 | 33.49 | 4.20 | 25.78 | 223 | 0.21 |
| 152 | 8.86 | 33.93 | 3.01 | 171 | 100 | 9.90 | 33.69 | 3.53 | 25.97 | 205 | 0.26 |
| 197 | 8.78 | 34.18 | 1.85 | 151 | 150 | 8.88 | 33.92 | 3.06 | 26.31 | 172 | 0.36 |
| 291 | 7.78 | 34.20 | 1.84 | 135 | 200 | 8.78 | 34.18 | 1.85 | 26.53 | 151 | 0.44 |
| 388 | 6.93 | 34.23 | 0.72 | 122 | 250 | 8.27 | 34.20 | 1.85 | 26.63 | 142 | 0.51 |
| 482 | 6.31 | 34.33 | 0.45 | 106 | 300 | 7.70 | 34.20 | 1.82 | 26.71 | 134 | 0.59 |
| 580 | 5.80 | 34.34 | 0.31 | 99 | 400 | 6.84 | 34.24 | 0.66 | 26.86 | 120 | 0.72 |
| 674 | 5.30 | 34.36 | 0.28 | 92 | 500 | 6.22 | 34.33 | 0.43 | 27.02 | 105 | 0.84 |
| 776 | 4.86 | 34.43 | 0.30 | 82 | 600 | 5.69 | 34.34 | 0.30 | 27.09 | 98 | 0.94 |
| 972 | 4.22 | 34.49 | 0.41 | 71 | 700 | 5.19 | 34.38 | 0.26 | 27.18 | 89 | 1.05 |
| | | | | | 800 | 4.77 | 34.44 | 0.32 | 27.28 | 80 | 1.14 |
| | | | | | 1000 | (4.15) | (34.50) | (0.43) | (27.39) | (69) | (1.31) |

a) The bathythermograph slide for this station was missing. The temperature values were interpolated from the bathythermograph slide obtained one-half hour later.

b) Loose bottle cap; value falls on property curve.

SIO

CCOFI 5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **90.45** | HORIZON; March 9, 1952; 0553 GCT; 32°55'N, 118°56.5'W; sounding, 950 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | - | 33.19 | 6.00 | | 0 | 13.7 | 33.19 | 6.00 | 24.87 | 309 | 0.00 |
| 9 | 13.60 | 33.19 | 6.01 | 307 | 10 | 13.6 | 33.19 | 6.03 | 24.89 | 307 | 0.03 |
| 23 | - | 33.19 | 6.03 | | 20 | 13.6 | 33.19 | 6.03 | 24.89 | 307 | 0.06 |
| 50 | - | 33.19 | 6.00 | | 30 | 13.5 | 33.19 | 6.03 | 24.91 | 305 | 0.09 |
| 72 | - | 33.15 | 5.64 | | 50 | 13.5 | 33.19 | 6.00 | 24.91 | 305 | 0.15 |
| 98 | 9.96 | 33.26 | 4.74 | 237 | 75 | 11.5 | 33.15 | 5.59 | 25.27 | 271 | 0.23 |
| 143 | 8.88 | 33.75 | 3.60 | 185 | 100 | 9.90 | 33.29 | 4.66 | 25.66 | 234 | 0.29 |
| 237 | 8.07 | 34.09 | 2.06 | 147 | 150 | 8.86 | 34.00 | 2.80 | 26.38 | 166 | 0.39 |
| | | | | | 200 | 8.48 | 34.09 | 2.08 | 26.51 | 153 | 0.47 |
| **90.47** | PAOLINA-T; March 5, 1952; 2049 GCT; 32°46'N, 119°03'W; sounding, 550 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 15°. | | | | | | | | | | |
| 0 | - | 33.22 | | | 0 | 13.0 | 33.22 | | 25.04 | 293 | 0.00 |
| 9 | 12.94 | 33.26 | | 289 | 10 | 12.9 | 33.26 | | 25.08 | 289 | 0.03 |
| 24 | - | 33.24 | | | 20 | 12.8 | 33.24 | | 25.09 | 288 | 0.06 |
| 53 | - | 33.24 | | | 30 | 12.80 | 33.24 | | 25.09 | 288 | 0.09 |
| 77 | - | 33.22 | | | 50 | 12.80 | 33.24 | | 25.09 | 288 | 0.14 |
| 105 | - | 33.26 | | | 75 | 12.70 | 33.22 | | 25.09 | 288 | 0.22 |
| 158 | 9.04 | 33.71 | | 190 | 100 | 10.30 | 33.24 | | 25.55 | 244 | 0.28 |
| 209 | 8.36 | 33.98 | | 160 | 150 | 9.2 | 33.64 | | 26.04 | 198 | 0.40 |
| 265 | 7.59 | 34.04 | | 144 | 200 | 8.53 | 33.96 | | 26.40 | 164 | 0.49 |
| 313 | 7.25 | 34.11 | | 135 | 250 | 7.75 | 34.03 | | 26.57 | 147 | 0.57 |
| 423 | 6.62 | 34.25 | | 116 | 300 | 7.31 | 34.09 | | 26.68 | 137 | 0.64 |
| 529 | 5.98 | 34.29 | | 105 | 400 | 6.78 | 34.23 | | 26.86 | 120 | 0.77 |
| 636 | 5.44 | 34.36 | | 94 | 500 | 6.16 | 34.28 | | 26.99 | 108 | 0.89 |
| | | | | | 600 | 5.60 | 34.34 | | 27.10 | 97 | 1.00 |
| **90.53** | HORIZON; March 9, 1952; 1130 GCT; 32°37.5'N, 119°31'W; sounding, 230 fm; wind, 320°, force 5; weather, cloudy; sea, moderate; wire angle, 26°. | | | | | | | | | | |
| 0 | 13.94 | 33.22 | 5.85 | 311 | 0 | 13.94 | 33.22 | 5.85 | 24.85 | 311 | 0.00 |
| 9 | 13.97 | 33.21 | 5.90 | 313 | 10 | 13.97 | 33.21 | 5.91 | 24.83 | 313 | 0.03 |
| 22 | 13.96 | 33.22 | 5.93 | 312 | 20 | 13.96 | 33.22 | 5.93 | 24.84 | 312 | 0.06 |
| 45 | 13.95 | 33.21 | 5.90 | 312 | 30 | 13.95 | 33.22 | 5.92 | 24.84 | 312 | 0.09 |
| 67 | 12.92 | 33.17 | 5.90 | 295 | 50 | 13.94 | 33.20 | 5.90 | 24.83 | 313 | 0.16 |
| 88 | 10.60 | 33.12 | 5.31 | 258 | 75 | 11.60 | 33.14 | 5.88 | 25.24 | 274 | 0.23 |
| 133 | 9.64 | 33.66 | 3.63 | 203 | 100 | 10.60 | 33.19 | 4.35 | 25.46 | 253 | 0.30 |
| 173 | 8.70 | 33.87 | 3.31 | 173 | 150 | 9.24 | 33.77 | 3.50 | 26.14 | 188 | 0.41 |
| 216 | 8.02 | 34.00 | 2.89 | 153 | 200 | 8.29 | 33.96 | 3.08 | 26.44 | 160 | 0.50 |
| 259 | 7.33 | 34.09 | 1.98 | 137 | 250 | 7.44 | 34.08 | 2.14 | 26.65 | 139 | 0.57 |
| 310 | 6.96 | 34.14 | 1.38 | 129 | 300 | 7.00 | 34.13 | 1.45 | 26.76 | 130 | 0.64 |
| **9060** | HORIZON; March 9, 1952; 1517 GCT; 32°23'N, 120°01.5'W; sounding, 600 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 24°. | | | | | | | | | | |
| 0 | - | 33.22 | 6.01 | | 0 | 13.4 | 33.22 | 6.01 | 24.96 | 301 | 0.00 |
| 9 | 13.35 | 33.21 | 6.04 | 301 | 10 | 13.4 | 33.21 | 6.04 | 24.95 | 302 | 0.03 |
| 23 | - | 33.24 | 6.04 | | 20 | 13.4 | 33.24 | 6.04 | 24.97 | 299 | 0.06 |
| 46 | - | 33.24 | 6.04 | | 30 | 13.4 | 33.24 | 6.04 | 24.97 | 299 | 0.09 |
| 68 | - | 33.23 | 5.30 | | 50 | 13.4 | 33.24 | 6.03 | 24.97 | 299 | 0.15 |
| 91 | 9.96 | 33.30 | 4.59 | 235 | 75 | 11.1 | 33.24 | 5.03 | 25.41 | 258 | 0.22 |
| 141 | 9.27 | 33.81 | 3.25 | 186 | 100 | 9.60 | 33.38 | 4.32 | 25.78 | 223 | 0.28 |
| 185 | 7.83 | 33.95 | 3.03 | 155 | 150 | 8.90 | 33.84 | 3.20 | 26.25 | 178 | 0.38 |
| 274 | 7.55 | 34.14 | 1.89 | 137 | 200 | 7.77 | 33.99 | 2.91 | 26.54 | 151 | 0.47 |
| 368 | 6.55 | 34.15 | 1.11 | 123 | 250 | 7.62 | 34.11 | 2.22 | 26.65 | 140 | 0.54 |
| 458 | 6.08 | 34.25 | 0.61 | 109 | 300 | 7.40 | 34.15 | 1.63 | 26.71 | 134 | 0.61 |
| 553 | 5.48 | 34.29 | 0.45 | 99 | 400 | 6.38 | 34.17 | 0.90 | 26.87 | 119 | 0.74 |
| 646 | 5.08 | 34.38 | 0.36 | 88 | 500 | 5.78 | 34.28 | 0.52 | 27.03 | 104 | 0.86 |
| 744 | 4.63 | 34.43 | 0.36 | 79 | 600 | 5.28 | 34.33 | 0.40 | 27.13 | 94 | 0.97 |
| 936 | 4.10 | 34.47 | 0.56 | 71 | 700 | 4.82 | 34.41 | 0.36 | 27.25 | 83 | 1.06 |
| | | | | | 800 | 4.45 | 34.45 | 0.38 | 27.32 | 76 | 1.15 |
| | | | | | 1000 | (3.99) | (34.47) | | (27.39) | (70) | (1.31) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| HORIZON; March 9, 1952; 2057 GCT; 32°05'N, 120°39'W; sounding, 2050 fm; wind, 290°, force 5; weather, overcast; sea, very rough; wire angle, 50°. | | | | | | | | | | | 90.70 |
| 0 | - | 33.19 | 5.93 | | 0 | 14.4 | 33.19 | 5.93 | 24.73 | 323 | 0.00 |
| 6 | 14.34 | 33.21 | 5.86 | 320 | 10 | 14.3 | 33.21 | 5.86 | 24.76 | 319 | 0.03 |
| 16 | - | 33.22 | 5.89 | | 20 | 14.3 | 33.22 | 5.89 | 24.77 | 318 | 0.06 |
| 35 | - | 33.21 | 5.89 | | 30 | 14.2 | 33.21 | 5.89 | 24.78 | 317 | 0.10 |
| 50 | - | 33.21 | 5.86 | | 50 | 14.1 | 33.21 | 5.86 | 24.80 | 315 | 0.16 |
| 66 | 14.32 | 33.19 | 5.80 | 321 | 75 | 14.20 | 33.17 | 5.78 | 24.75 | 320 | 0.24 |
| 98 | 11.89 | 33.13 | 5.76 | 280 | 100 | 11.90 | 33.13 | 5.75 | 25.18 | 280 | 0.31 |
| 161 | 8.95 | 33.55 | 4.20 | 200 | 150 | 9.04 | 33.39 | 4.57 | 25.87 | 214 | 0.44 |
| 189 | 8.69 | 33.80 | 3.61 | 178 | 200 | 8.58 | 33.86 | 3.46 | 26.31 | 172 | 0.54 |
| 251 | 7.75 | 34.02 | 2.94 | 148 | 250 | 7.76 | 34.02 | 2.95 | 26.56 | 148 | 0.62 |
| 312 | 7.00 | 34.05 | 2.11 | 136 | 300 | 7.12 | 34.04 | 2.30 | 26.67 | 138 | 0.69 |
| 372 | 6.44 | 34.11 | 1.35 | 124 | 400 | 6.24 | 34.14 | 1.11 | 26.86 | 120 | 0.83 |
| 496 | 5.62 | 34.22 | 0.56 | 106 | 500 | 5.59 | 34.22 | 0.54 | 27.01 | 106 | 0.95 |
| 651 | 5.06 | 34.36 | 0.30 | 89 | 600 | 5.23 | 34.32 | 0.33 | 27.13 | 94 | 1.05 |
| 832 | 4.40 | 34.43 | 0.38 | 77 | 700 | 4.88 | 34.39 | 0.30 | 27.23 | 85 | 1.15 |
| | | | | | 800 | 4.52 | 34.42 | 0.35 | 27.29 | 79 | 1.24 |
| | | | | | 1000 | (3.93) | (34.46) | | (27.39) | (70) | (1.40) |
| HORIZON; March 10, 1952; 0347 GCT; 31°46'N, 121°19'W; sounding, 1950 fm; wind, 300°, force 5; weather, overcast; sea, rough; wire angle, 11°. | | | | | | | | | | | 90.80 |
| 0 | - | 33.26 | 5.80 | | 0 | 14.9 | 33.26 | 5.80 | 24.67 | 328 | 0.00 |
| 10 | 14.64 | 33.26 | 5.82 | 322 | 10 | 14.64 | 33.26 | 5.82 | 24.73 | 322 | 0.03 |
| 24 | - | 33.28 | 5.82 | | 20 | 14.6 | 33.28 | 5.82 | 24.75 | 320 | 0.06 |
| 54 | - | 33.26 | 5.81 | | 30 | 14.6 | 33.28 | 5.82 | 24.75 | 320 | 0.10 |
| 78 | - | 33.26 | 5.81 | | 50 | 14.6 | 33.28 | 5.82 | 24.75 | 320 | 0.16 |
| 107 | 13.18 | 33.21 | 5.74 | 297 | 75 | 14.6 | 33.26 | 5.81 | 24.74 | 322 | 0.24 |
| 159 | 9.96 | 33.31 | 4.78 | 234 | 100 | 14.6 | 33.22 | 5.76 | 24.71 | 325 | 0.32 |
| 263 | 7.93 | 33.96 | 3.12 | 155 | 150 | 10.29 | 33.29 | 4.93 | 25.59 | 241 | 0.47 |
| | | | | | 200 | 8.81 | 33.49 | 4.19 | 25.99 | 203 | 0.58 |
| | | | | | 250 | 7.96 | 33.85 | 3.54 | 26.40 | 164 | 0.67 |
| HORIZON; March 10, 1952; 1010 GCT; 31°25'N, 121°59'W; sounding, 2200 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 35°. | | | | | | | | | | | 90.90 |
| 0 | - | 33.22 | 5.80 | | 0 | 14.9 | 33.22 | 5.80 | 24.64 | 331 | 0.00 |
| 8 | 14.62 | 33.21 | 5.80 | 326 | 10 | 14.6 | 33.21 | 5.81 | 24.70 | 325 | 0.03 |
| 20 | - | 33.22 | 5.82 | | 20 | 14.6 | 33.22 | 5.82 | 24.71 | 325 | 0.07 |
| 45 | - | 33.22 | 5.82 | | 30 | 14.6 | 33.22 | 5.82 | 24.71 | 325 | 0.10 |
| 66 | - | 33.23 | 5.82 | | 50 | 14.6 | 33.22 | 5.82 | 24.71 | 325 | 0.16 |
| 89 | 14.54 | 33.21 | 5.80 | 324 | 75 | 14.5 | 33.22 | 5.82 | 24.73 | 323 | 0.24 |
| 132 | 10.78 | 33.08 | 5.45 | 264 | 100 | 13.50 | 33.18 | 5.76 | 24.90 | 306 | 0.32 |
| 221 | 8.72 | 33.87 | 3.82 | 173 | 150 | 10.07 | 33.14 | 5.18 | 25.51 | 248 | 0.46 |
| | | | | | 200 | 9.01 | 33.78 | 4.22 | 26.18 | 184 | 0.57 |
| HORIZON; March 12, 1952; 0113 GCT; 32°55.5'N, 117°19'W; sounding, 45 fm; wind, 280°, force 2; weather, partly cloudy; sea, rough; wire angle, 04°. | | | | | | | | | | | 93.27 |
| 0 | 13.48 | 33.24 | 6.19 | 301 | 0 | 13.48 | 33.24 | 6.19 | 24.96 | 301 | 0.00 |
| 10 | 13.45 | 33.24 | 6.19 | 300 | 10 | 13.45 | 33.24 | 6.19 | 24.96 | 300 | 0.03 |
| 20 | 13.31 | 33.24 | 6.05 | 298 | 20 | 13.31 | 33.24 | 6.05 | 24.99 | 298 | 0.06 |
| 30 | 13.17 | 33.30 | 6.08 | 291 | 30 | 13.17 | 33.30 | 6.08 | 25.06 | 291 | 0.09 |
| 51 | 11.87 | 33.40 | 4.87 | 259 | 50 | 11.92 | 33.40 | 4.95 | 25.38 | 260 | 0.14 |

SIO

CCOFI
5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 93.30 | HORIZON; March 11, 1952; 2030 GCT; 32°50'N, 117°31.5'W; sounding, 490 fm; wind, 280°, force 5; weather, cloudy; sea, very rough; wire angle, 40°. | | | | | | | | | | |
| 0 | - | 33.26 | 6.02 | | 0 | 13.9 | 33.26 | 6.02 | 24.88 | 308 | 0.00 |
| 8 | 13.40 | 33.28 | 6.00 | 296 | 10 | 13.4 | 33.28 | 6.01 | 25.00 | 296 | 0.03 |
| 19 | - | 33.24 | 6.05 | | 20 | 13.3 | 33.24 | 6.04 | 24.99 | 297 | 0.06 |
| 38 | - | 33.24 | 5.63 | | 30 | 13.2 | 33.24 | 5.92 | 25.01 | 296 | 0.09 |
| 58 | - | 33.40 | 4.78 | | 50 | 11.2 | 33.36 | 5.00 | 25.48 | 251 | 0.14 |
| 75 | 10.29 | 33.40 | 4.42 | 232 | 75 | 10.29 | 33.40 | 4.42 | 25.68 | 232 | 0.21 |
| 112 | 9.85 | 33.77 | 3.35 | 198 | 100 | 10.00 | 33.57 | 3.71 | 25.86 | 215 | 0.26 |
| 142 | 9.50 | 34.02 | 2.44 | 174 | 150 | 9.48 | 34.10 | 2.27 | 26.36 | 168 | 0.36 |
| 174 | 9.44 | 34.20 | 1.80 | 160 | 200 | 9.22 | 34.18 | 1.63 | 26.46 | 158 | 0.44 |
| 206 | 9.14 | 34.18 | 1.61 | 157 | 250 | 8.65 | 34.27 | 1.38 | 26.62 | 142 | 0.52 |
| 277 | 8.34 | 34.29 | 1.22 | 136 | 300 | 8.11 | 34.29 | 1.10 | 26.72 | 133 | 0.59 |
| 352 | 7.60 | 34.29 | 0.84 | 126 | 400 | 7.08 | 34.30 | 0.68 | 26.88 | 118 | 0.72 |
| 437 | 6.72 | 34.31 | 0.59 | 113 | 500 | 6.35 | 34.32 | 0.47 | 26.99 | 107 | 0.84 |
| 525 | 6.20 | 34.33 | 0.43 | 105 | 600 | 5.69 | 34.33 | 0.34 | 27.08 | 99 | 0.95 |
| 622 | 5.54 | 34.33 | 0.31 | 97 | | | | | | | |
| 93.40 | HORIZON; March 11, 1952; 1618 GCT; 32°30'N, 118°10'W; sounding, 1000 fm; wind, 290°, force 7; weather, partly cloudy; sea, high; wire angle, 28°. | | | | | | | | | | |
| 0 | - | 33.26 | 5.94 | | 0 | 13.8 | 33.26 | 5.94 | 24.91 | 306 | 0.00 |
| 9 | 13.64 | 33.26 | 5.94 | 303 | 10 | 13.6 | 33.26 | 5.94 | 24.95 | 302 | 0.03 |
| 27 | - | 33.24 | 5.99 | | 20 | 13.6 | 33.25 | 5.98 | 24.94 | 303 | 0.06 |
| 53 | - | 33.22 | 5.55 | | 30 | 13.6 | 33.23 | 5.98 | 24.92 | 304 | 0.09 |
| 79 | - | 33.39 | 4.48 | | 50 | 13.0 | 33.22 | 5.69 | 25.04 | 293 | 0.15 |
| 105 | 9.79 | 33.57 | 3.97 | 212 | 75 | 11.2 | 33.36 | 4.60 | 25.48 | 251 | 0.22 |
| 155 | 8.70 | 33.85 | 3.10 | 174 | 100 | 10.1 | 33.53 | 4.06 | 25.81 | 220 | 0.28 |
| 254 | 8.55 | 34.28 | 1.10 | 140 | 150 | 8.74 | 33.82 | 3.19 | 26.26 | 177 | 0.38 |
| | | | | | 200 | 8.50 | 34.15 | 2.14 | 26.55 | 149 | 0.46 |
| | | | | | 250 | 8.55 | 34.28 | 1.15 | 26.65 | 140 | 0.54 |
| 93.50 | HORIZON; March 11, 1952; 1037 GCT; 32°11'N, 118°53'W; sounding, 800 fm; wind, 310°, force 5; weather, cloudy; sea, rough; wire angle, 40°. | | | | | | | | | | |
| 0 | - | 33.20 | 6.01 | | 0 | 13.4 | 33.20 | 6.01 | 24.94 | 302 | 0.00 |
| 8 | 13.41 | 33.22 | 6.01 | 301 | 10 | 13.4 | 33.23 | 6.03 | 24.96 | 300 | 0.03 |
| 19 | - | 33.23 | 6.08 | | 20 | 13.4 | 33.23 | 6.07 | 24.96 | 300 | 0.06 |
| 42 | - | 33.21 | 6.10 | | 30 | 13.3 | 33.22 | 6.10 | 24.98 | 299 | 0.09 |
| 62 | - | 33.26 | 5.97 | | 50 | 13.1 | 33.23 | 6.06 | 25.02 | 294 | 0.15 |
| 92 | 11.72 | 33.15 | 5.52 | 275 | 75 | 11.7 | 33.22 | 5.82 | 25.28 | 270 | 0.22 |
| 118 | 10.00 | 33.35 | 4.69 | 231 | 100 | 10.40 | 33.17 | 5.32 | 25.48 | 251 | 0.29 |
| 193 | 8.66 | 34.02 | 2.52 | 161 | 150 | 9.19 | 33.65 | 3.54 | 26.05 | 197 | 0.40 |
| 225 | 8.43 | 34.11 | 2.01 | 151 | 200 | 8.61 | 34.04 | 2.41 | 26.45 | 159 | 0.49 |
| 300 | 7.47 | 34.16 | 1.40 | 134 | 250 | 8.13 | 34.14 | 1.79 | 26.60 | 145 | 0.57 |
| 372 | 6.91 | 34.25 | 0.78 | 120 | 300 | 7.47 | 34.16 | 1.40 | 26.71 | 134 | 0.64 |
| 445 | 6.45 | 34.31 | 0.54 | 109 | 400 | 6.73 | 34.28 | 0.66 | 26.91 | 115 | 0.77 |
| 597 | 5.59 | 34.34 | 0.32 | 97 | 500 | 6.13 | 34.33 | 0.43 | 27.03 | 104 | 0.89 |
| 773 | 4.66 | 34.43 | 0.33 | 80 | 600 | 5.57 | 34.34 | 0.32 | 27.11 | 97 | 0.99 |
| 963 | 4.03 | 34.51 | 0.51 | 67 | 700 | 5.00 | 34.38 | 0.32 | 27.21 | 87 | 1.09 |
| | | | | | 800 | 4.56 | 34.44 | 0.35 | 27.30 | 78 | 1.18 |
| | | | | | 1000 | (3.95) | (34.52) | (0.57) | (27.43) | (66) | (1.34) |
| 93.60 | HORIZON; March 11, 1952; 0406 GCT; 31°54.5'N, 119°36'W; sounding, 1470 fm; wind, 280°, force 4; weather, intermittent moderate drizzle; sea, rough; wire angle, 38°. | | | | | | | | | | |
| 0 | - | 33.33 | 5.85 | | 0 | 14.3 | 33.33 | 5.85 | 24.86 | 310 | 0.00 |
| 8 | 14.30 | 33.35 | 5.80 | 309 | 10 | 14.3 | 33.35 | 5.81 | 24.87 | 309 | 0.03 |
| 24 | - | 33.33 | 5.90 | | 20 | 14.3 | 33.34 | 5.88 | 24.86 | 310 | 0.06 |
| 47 | - | 33.22 | 5.91 | | 30 | 14.3 | 33.31 | 5.91 | 24.84 | 312 | 0.09 |
| 71 | - | 33.21 | 5.46 | | 50 | 13.1 | 33.21 | 5.89 | 25.01 | 296 | 0.15 |
| 94 | 11.07 | 33.30 | 4.82 | 253 | 75 | 12.3 | 33.22 | 5.35 | 25.17 | 280 | 0.23 |
| 139 | 9.60 | 33.68 | 3.65 | 201 | 100 | 11.00 | 33.35 | 4.65 | 25.51 | 248 | 0.29 |
| 223 | 8.96 | 34.20 | 2.03 | 152 | 150 | 9.46 | 33.87 | 3.23 | 26.18 | 184 | 0.40 |
| | | | | | 200 | 9.14 | 34.18 | 2.26 | 26.47 | 157 | 0.49 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| HORIZON; March 10, 1952; 1945 GCT; 31°33'N, 120°22.5'W; sounding, 2140 fm; wind, 280°, force 4; weather, drizzle; sea, rough; wire angle, 37°. | | | | | | | | | | | 93.70 |
| 0 | 14.44 | 33.24 | 5.89 | 320 | 0 | 14.44 | 33.24 | 5.89 | 24.76 | 320 | 0.00 |
| 8 | - | 33.24 | 5.90 | | 10 | 14.2 | 33.24 | 5.89 | 24.81 | 315 | 0.03 |
| 24 | - | 33.21 | 5.81 | | 20 | 14.1 | 33.21 | 5.83 | 24.80 | 315 | 0.06 |
| 46 | - | 33.22 | 5.95 | | 30 | 14.0 | 33.21 | 5.83 | 24.83 | 313 | 0.09 |
| 68 | 13.34 | 33.21 | 6.10 | 300 | 50 | 13.9 | 33.22 | 6.00 | 24.85 | 311 | 0.16 |
| 89 | 11.30 | 33.12 | 5.59 | 270 | 75 | 13.30 | 33.19 | 6.05 | 24.95 | 301 | 0.23 |
| 133 | 9.70 | 33.60 | 3.76 | 208 | 100 | 10.76 | 33.17 | 4.72 | 25.42 | 257 | 0.30 |
| 221 | 8.13 | 33.99 | 2.89 | 156 | 150 | 9.37 | 33.73 | 3.53 | 26.09 | 193 | 0.42 |
| 264 | 7.50 | 34.05 | 2.49 | 143 | 200 | 8.49 | 33.94 | 3.06 | 26.39 | 165 | 0.51 |
| 436 | 6.14 | 34.18 | 0.84 | 115 | 250 | 7.69 | 34.03 | 2.62 | 26.58 | 147 | 0.59 |
| 519 | 5.62 | 34.27 | 0.54 | 102 | 300 | 7.15 | 34.07 | 2.08 | 26.69 | 136 | 0.66 |
| 693 | 4.94 | - | 0.30 | | 400 | 6.41 | 34.13 | 1.10 | 26.83 | 122 | 0.80 |
| 881 | 4.28 | 34.42 | 0.44 | 77 | 500 | 5.72 | 34.25 | 0.58 | 27.02 | 105 | 0.92 |
| | | | | | 600 | 5.30 | (34.33) | 0.42 | (27.13) | (94) | (1.02) |
| | | | | | 700 | 4.91 | (34.38) | 0.30 | (27.22) | (86) | (1.12) |
| | | | | | 800 | 4.54 | (34.41) | 0.36 | (27.28) | (80) | (1.21) |
| | | | | | 1000 | (3.95) | (34.47) | | (27.39) | (70) | (1.38) |
| HORIZON; March 12, 1952; 1217 GCT; 32°15'N, 117°09'W; sounding, 25 fm; wind, 300°, force 4; weather, cloudy; sea, very rough; wire angle, 00°. | | | | | | | | | | | 97.30 |
| 0 | 13.42 | 33.22 | 6.12 | 301 | 0 | 13.42 | 33.22 | 6.12 | 24.95 | 301 | 0.00 |
| 10 | 13.44 | 33.22 | 5.98 | 302 | 10 | 13.44 | 33.22 | 5.98 | 24.95 | 302 | 0.03 |
| 20 | 13.45 | 33.24 | 5.99 | 300 | 20 | 13.45 | 33.24 | 5.99 | 24.96 | 300 | 0.06 |
| 30 | 13.43 | 33.22 | 5.94 | 301 | 30 | 13.42 | 33.22 | 5.94 | 24.95 | 301 | 0.09 |
| HORIZON; March 12, 1952; 1418, 1459 GCT; 32°11.5'N, 117°17'W; sounding, 700 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 32°, 24°. | | | | | | | | | | | 97.32 |
| 0 | - | 33.26 | 5.90 | | 0 | 14.2 | 33.26 | 5.90 | 24.82 | 314 | 0.00 |
| 8 | 14.26 | 33.25 | 5.91 | 315 | 10 | 14.3 | 33.25 | 5.90 | 24.79 | 316 | 0.03 |
| 21 | - | 33.35 | 5.90 | | 20 | 14.3 | 33.35 | 5.90 | 24.87 | 309 | 0.06 |
| 42 | - | 33.25 | 5.84 | | 30 | 14.2 | 33.31 | 5.89 | 24.86 | 310 | 0.09 |
| 64 | - | 33.25 | 5.37 | | 50 | 14.2 | 33.25 | 5.78 | 24.81 | 314 | 0.16 |
| 85 | 10.74 | 33.37 | 4.47 | 242 | 75 | 11.3 | 33.28 | 4.90 | 25.40 | 258 | 0.23 |
| 128 | 9.83 | 33.77 | 3.25 | 198 | 100 | 10.30 | 33.51 | 3.93 | 25.76 | 224 | 0.29 |
| | | | | | 150 | 9.46 | 33.92 | 2.90 | 26.22 | 181 | 0.39 |
| 231 | 8.32 | 34.13 | 2.20 | 148 | 200 | 8.73 | 34.10 | 2.38 | 26.48 | 156 | 0.48 |
| 280 | 7.44 | 34.07 | 1.91 | 140 | 250 | 8.00 | 34.11 | 2.12 | 26.60 | 145 | 0.55 |
| HORIZON; March 12, 1952; 1938 GCT; 31°55'N, 117°51.5'W; sounding, 500 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | | 97.40 |
| 0 | - | 33.24 | 5.94 | | 0 | 14.0 | 33.24 | 5.94 | 24.85 | 311 | 0.00 |
| 10 | 13.82 | 33.24 | 5.94 | 308 | 10 | 13.82 | 33.24 | 5.94 | 24.89 | 308 | 0.03 |
| 24 | - | 33.24 | 5.96 | | 20 | 13.8 | 33.24 | 5.94 | 24.89 | 307 | 0.06 |
| 49 | - | 33.24 | 5.96 | | 30 | 13.8 | 33.24 | 5.96 | 24.89 | 307 | 0.09 |
| 73 | 12.24 | 33.24 | 5.53 | 278 | 50 | 13.8 | 33.24 | 5.95 | 24.89 | 307 | 0.15 |
| 98 | 10.76 | 33.28 | 4.64 | 249 | 75 | 12.00 | 33.24 | 5.50 | 25.24 | 273 | 0.23 |
| 148 | 9.47 | 33.87 | 2.99 | 185 | 100 | 10.60 | 33.30 | 4.59 | 25.54 | 245 | 0.29 |
| 194 | 8.42 | 33.96 | 2.89 | 162 | 150 | 9.41 | 33.87 | 2.98 | 26.19 | 184 | 0.40 |
| 240 | 8.07 | 34.13 | 2.33 | 144 | 200 | 8.36 | 33.98 | 2.83 | 26.44 | 160 | 0.49 |
| 287 | 7.58 | 34.16 | 1.66 | 135 | 250 | 7.98 | 34.14 | 2.18 | 26.62 | 142 | 0.57 |
| 338 | 7.11 | 34.16 | 1.16 | 129 | 300 | 7.43 | 34.16 | 1.52 | 26.72 | 133 | 0.64 |
| 386 | 6.74 | 34.23 | 0.87 | 119 | 400 | 6.64 | 34.24 | 0.78 | 26.89 | 117 | 0.77 |
| 434 | 6.46 | 34.25 | 0.61 | 114 | 500 | (6.03) | (34.35) | (0.43) | (27.06) | (101) | (0.88) |
| 483 | 6.14 | 34.34 | 0.45 | 103 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 97.50 | HORIZON; March 13, 1952; 0056 GCT; 31°36'N, 118°30'W; sounding, 1100 fm; wind, 280°, force 2; weather, cloudy; sea, very rough; wire angle, 25°. | | | | | | | | | | |
| 0 | - | 33.24 | 6.01 | | 0 | 14.0 | 33.24 | 6.01 | 24.85 | 311 | 0.00 |
| 9 | 13.76 | 33.24 | 6.00 | 306 | 10 | 13.7 | 33.24 | 6.00 | 24.91 | 305 | 0.03 |
| 23 | - | 33.24 | 6.01 | | 20 | 13.6 | 33.24 | 6.00 | 24.93 | 303 | 0.06 |
| 50 | - | 33.24 | 5.37 | | 30 | 13.6 | 33.24 | 5.96 | 24.93 | 303 | 0.09 |
| 73 | - | 33.26 | 4.77 | | 50 | 13.0 | 33.24 | 5.37 | 25.05 | 292 | 0.15 |
| 98 | 9.95 | 33.60 | 3.95 | 212 | 75 | 10.6 | 33.26 | 4.71 | 25.51 | 248 | 0.22 |
| 145 | 9.15 | 33.91 | 3.10 | 177 | 100 | 10.00 | 33.63 | 3.92 | 25.90 | 211 | 0.28 |
| 237 | 7.87 | 34.14 | 1.70 | 141 | 150 | 9.03 | 33.92 | 3.02 | 26.29 | 174 | 0.37 |
| | | | | | 200 | 8.25 | 34.09 | 2.25 | 26.54 | 150 | 0.46 |
| 97.60 | HORIZON; March 13, 1952; 0630 GCT; 31°16'N, 119°10'W; sounding, 650 fm; wind, 300°, force 2; weather, intermittent light drizzle; sea, rough; wire angle, 40°. | | | | | | | | | | |
| 0 | - | 33.28 | 5.85 | | 0 | 14.2 | 33.28 | 5.85 | 24.84 | 312 | 0.00 |
| 12 | 14.12 | 33.30 | 5.84 | 309 | 10 | 14.1 | 33.30 | 5.84 | 24.87 | 309 | 0.03 |
| 30 | - | 33.28 | 5.91 | | 20 | 14.1 | 33.29 | 5.88 | 24.87 | 309 | 0.06 |
| 50 | - | 33.31 | 5.80 | | 30 | 14.1 | 33.28 | 5.91 | 24.86 | 310 | 0.09 |
| 68 | - | 33.28 | 5.86 | | 50 | 14.1 | 33.31 | 5.80 | 24.88 | 308 | 0.16 |
| 106 | 10.84 | 33.35 | 4.64 | 245 | 75 | 14.1 | 33.28 | 5.83 | 24.86 | 310 | 0.23 |
| 140 | 10.28 | 33.55 | 3.97 | 221 | 100 | 11.7 | 33.33 | 4.79 | 25.37 | 261 | 0.30 |
| 173 | 9.59 | 33.94 | 2.86 | 181 | 150 | 10.09 | 33.69 | 3.24 | 25.94 | 208 | 0.42 |
| 205 | 8.56 | 34.00 | 2.87 | 161 | 200 | 8.76 | 33.99 | 2.87 | 26.39 | 165 | 0.52 |
| 279 | 7.57 | 34.09 | 2.16 | 140 | 250 | 7.85 | 34.05 | 2.60 | 26.57 | 147 | 0.60 |
| 353 | 7.00 | 34.20 | 1.08 | 125 | 300 | 7.38 | 34.12 | 1.80 | 26.69 | 136 | 0.67 |
| 437 | 6.50 | 34.22 | 0.79 | 117 | 400 | 6.70 | 34.21 | 0.85 | 26.86 | 120 | 0.80 |
| 521 | 6.16 | 34.31 | 0.44 | 106 | 500 | 6.27 | 34.29 | 0.53 | 26.98 | 109 | 0.93 |
| 616 | 5.52 | 34.37 | 0.35 | 94 | 600 | 5.63 | 34.36 | 0.35 | 27.11 | 96 | 1.03 |
| 712 | 5.00 | 34.40 | 0.35 | 86 | 700 | 5.05 | 34.40 | 0.35 | 27.22 | 86 | 1.13 |
| 97.70 | HORIZON; March 13, 1952; 1237 GCT; 30°54.5'N, 119°48'W; sounding, 2000 fm; wind, 310°, force 5; weather, rain; sea, rough; wire angle, 18°. | | | | | | | | | | |
| 0 | - | 33.35 | 5.80 | | 0 | 14.7 | 33.35 | 5.80 | 24.79 | 317 | 0.00 |
| 10 | 14.64 | 33.37 | 5.83 | 314 | 10 | 14.64 | 33.37 | 5.83 | 24.81 | 314 | 0.03 |
| 28 | - | 33.39 | 5.80 | | 20 | 14.6 | 33.39 | 5.81 | 24.84 | 312 | 0.06 |
| 57 | - | 33.35 | 5.79 | | 30 | 14.6 | 33.39 | 5.80 | 24.84 | 312 | 0.09 |
| 84 | - | 33.24 | 5.66 | | 50 | 14.6 | 33.37 | 5.80 | 24.82 | 314 | 0.16 |
| 112 | 11.24 | 33.28 | 4.99 | 257 | 75 | 14.4 | 33.34 | 5.73 | 24.84 | 312 | 0.24 |
| 165 | 9.55 | 33.80 | 3.38 | 191 | 100 | 12.2 | 33.24 | 5.40 | 25.21 | 277 | 0.31 |
| 266 | 8.06 | 34.14 | 2.12 | 144 | 150 | 9.98 | 33.65 | 3.78 | 25.92 | 209 | 0.43 |
| | | | | | 200 | 8.72 | 34.03 | 2.78 | 26.42 | 161 | 0.53 |
| | | | | | 250 | 8.11 | 34.14 | 2.20 | 26.60 | 144 | 0.61 |
| 100.29 | HORIZON; March 15, 1952; 1044 GCT; 31°42'N, 116°43.5'W; sounding, 45 fm; wind, 120°, force 2; weather, cloudy; sea, smooth; wire angle, 12°. | | | | | | | | | | |
| 0 | 13.34 | 33.25 | 6.14 | 298 | 0 | 13.34 | 33.25 | 6.14 | 24.99 | 298 | 0.00 |
| 10 | 13.32 | 33.26 | 6.16 | 296 | 10 | 13.32 | 33.26 | 6.16 | 25.00 | 296 | 0.03 |
| 20 | 13.30 | 33.29 | 6.14 | 294 | 20 | 13.30 | 33.29 | 6.14 | 25.03 | 294 | 0.06 |
| 30 | 12.89 | 33.30 | 5.99 | 285 | 30 | 12.89 | 33.30 | 5.99 | 25.12 | 285 | 0.09 |
| 49 | 10.94 | 33.49 | 4.12 | 237 | 50 | 10.88 | 33.50 | 4.10 | 25.65 | 235 | 0.14 |
| 73 | 9.64 | 33.82 | 3.15 | 191 | 75 | (9.56) | (33.85) | (3.11) | (26.15) | (187) | (0.19) |
| 100.30 | HORIZON; March 15, 1952; 0928 GCT; 31°40.5'N, 116°46.5'W; sounding, 180 fm; wind, 140°, force 4; weather, partly cloudy; sea, smooth; wire angle, 11°. | | | | | | | | | | |
| 0 | 13.12 | 33.28 | 5.79 | 291 | 0 | 13.12 | 33.28 | 5.79 | 25.06 | 291 | 0.00 |
| 10 | 13.06 | 33.26 | 5.73 | 291 | 10 | 13.06 | 33.26 | 5.73 | 25.05 | 291 | 0.03 |
| 24 | 11.85 | 33.41 | 4.86 | 258 | 20 | 12.98 | 33.33 | 5.50 | 25.12 | 285 | 0.06 |
| 48 | 10.15 | 33.68 | 3.55 | 209 | 30 | 11.00 | 33.50 | 4.18 | 25.63 | 237 | 0.08 |
| 72 | 9.76 | 33.80 | 3.22 | 194 | 50 | 10.12 | 33.69 | 3.53 | 25.93 | 208 | 0.13 |
| 95 | 9.35 | 33.99 | 2.51 | 174 | 75 | 9.71 | 33.81 | 3.15 | 26.09 | 193 | 0.18 |
| 146 | 9.30 | 34.13 | 2.00 | 163 | 100 | 9.34 | 34.01 | 2.42 | 26.31 | 172 | 0.23 |
| 193 | 9.07 | 34.18 | 1.66 | 155 | 150 | 9.30 | 34.13 | 1.96 | 26.41 | 163 | 0.31 |
| 240 | 8.89 | 34.23 | 1.41 | 149 | 200 | 9.04 | 34.18 | 1.62 | 26.49 | 155 | 0.39 |
| 287 | 8.50 | 34.23 | 1.11 | 143 | 250 | 8.83 | 34.23 | 1.34 | 26.56 | 148 | 0.47 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| HORIZON; March 14, 1952; 2146 GCT; 31°01'N, 118°02'W; sounding, 940 fm; wind, 180°, force 4; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | | 100.50 |
| 0 | - | 33.28 | 5.89 | | 0 | 14.7 | 33.28 | 5.89 | 24.73 | 322 | 0.00 |
| 10 | 14.18 | 33.26 | 5.87 | 313 | 10 | 14.18 | 33.26 | 5.87 | 24.83 | 313 | 0.03 |
| 24 | - | 33.28 | 5.88 | | 20 | 14.1 | 33.27 | 5.88 | 24.85 | 311 | 0.06 |
| 48 | - | 33.33 | 5.90 | | 30 | 14.1 | 33.30 | 5.89 | 24.87 | 309 | 0.09 |
| 72 | - | 33.27 | 5.03 | | 50 | 14.2 | 33.33 | 5.89 | 24.88 | 308 | 0.16 |
| 95 | 10.46 | 33.35 | 4.62 | 239 | 75 | 12.1 | 33.27 | 5.02 | 25.25 | 273 | 0.23 |
| 144 | 9.78 | 33.76 | 3.33 | 198 | 100 | 10.40 | 33.38 | 4.50 | 25.64 | 236 | 0.29 |
| 233 | 8.48 | 34.13 | 2.25 | 150 | 150 | 9.69 | 33.80 | 3.25 | 26.09 | 193 | 0.40 |
| 278 | 8.09 | 34.23 | 1.52 | 137 | 200 | 8.88 | 34.03 | 2.67 | 26.40 | 164 | 0.49 |
| 372 | 7.28 | 34.27 | 0.82 | 123 | 250 | 8.31 | 34.17 | 1.99 | 26.60 | 145 | 0.57 |
| 461 | 6.32 | 34.23 | 0.53 | 114 | 300 | 7.92 | 34.25 | 1.28 | 26.72 | 133 | 0.64 |
| 556 | 5.74 | 34.33 | 0.34 | 99 | 400 | 6.94 | 34.26 | 0.72 | 26.87 | 119 | 0.78 |
| 741 | 4.83 | 34.40 | 0.36 | 84 | 500 | 6.07 | 34.26 | 0.43 | 26.98 | 108 | 0.90 |
| 928 | 4.14 | 34.47 | 0.50 | 71 | 600 | 5.52 | 34.35 | 0.34 | 27.12 | 95 | 1.00 |
| 1127 | 3.58 | 34.54 | 0.75 | 61 | 700 | 5.02 | 34.39 | 0.36 | 27.21 | 87 | 1.10 |
| | | | | | 800 | 4.60 | 34.42 | 0.40 | 27.28 | 80 | 1.19 |
| | | | | | 1000 | 3.92 | 34.50 | 0.60 | 27.42 | 67 | 1.36 |
| HORIZON; March 14, 1952; 2305 GCT;[a] 31°01'N, 118°48'W; sounding, 940 fm; wind, 180°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | | 100.50 |
| 946 | 4.13 | 34.52 | 0.56 | 68 | | | | | | | |
| 949 | 4.12 | 34.51 | 0.55 | 68 | | | | | | | |
| 952 | 4.11 | 34.49 | 0.55 | 70 | | | | | | | |
| 955 | 4.12 | 34.51 | 0.62 | 68 | | | | | | | |
| 958 | 4.11 | 34.51 | 0.59 | 68 | | | | | | | |
| 961 | 4.10 | 34.51 | 0.56 | 68 | | | | | | | |
| 964 | 4.06 | 34.49 | 0.52 | 69 | | | | | | | |
| 967 | 4.04 | 34.51 | 0.59 | 67 | | | | | | | |
| 970 | 4.04 | 34.51 | 0.58 | 67 | | | | | | | |
| 973 | 4.04 | 34.51 | 0.58 | 67 | | | | | | | |
| 976 | 4.00 | 34.51 | 0.60 | 67 | | | | | | | |
| HORIZON; March 14, 1952; 1558 GCT; 30°44.5'N, 118°48'W; sounding, 1600 fm; wind, 190°, force 1; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | | 100.60 |
| 0 | - | 33.30 | 5.85 | | 0 | 14.2 | 33.30 | 5.85 | 24.85 | 311 | 0.00 |
| 10 | 14.18 | 33.28 | 5.88 | 312 | 10 | 14.18 | 33.28 | 5.88 | 24.84 | 312 | 0.03 |
| 25 | - | 33.30 | 5.86 | | 20 | 14.2 | 33.30 | 5.87 | 24.85 | 311 | 0.06 |
| 55 | - | 33.24 | 5.86 | | 30 | 14.2 | 33.30 | 5.86 | 24.85 | 311 | 0.09 |
| 80 | - | 33.26 | 5.78 | | 50 | 14.1 | 33.24 | 5.86 | 24.83 | 313 | 0.16 |
| 109 | 11.86 | 33.39 | 4.70 | 260 | 75 | 14.0 | 33.25 | 5.82 | 24.86 | 310 | 0.23 |
| 162 | 9.74 | 33.64 | 3.74 | 206 | 100 | 12.5 | 33.35 | 5.09 | 25.23 | 274 | 0.31 |
| 268 | 8.31 | 34.13 | 2.19 | 148 | 150 | 10.05 | 33.58 | 3.92 | 25.86 | 215 | 0.43 |
| 314 | 7.94 | 34.20 | 1.49 | 137 | 200 | 9.07 | 33.82 | 3.19 | 26.20 | 182 | 0.53 |
| 421 | 6.69 | 34.22 | 0.80 | 119 | 250 | 8.49 | 34.06 | 2.47 | 26.48 | 156 | 0.62 |
| 523 | 5.83 | 34.31 | 0.42 | 102 | 300 | 8.03 | 34.19 | 1.71 | 26.65 | 139 | 0.70 |
| 624 | 5.36 | 34.36 | 0.34 | 93 | 400 | 6.91 | 34.21 | 0.89 | 26.83 | 123 | 0.83 |
| 824 | 4.50 | 34.44 | 0.42 | 77 | 500 | 5.98 | 34.28 | 0.48 | 27.01 | 106 | 0.95 |
| 1029 | 3.94 | 34.47 | 0.62 | 69 | 600 | 5.48 | 34.35 | 0.36 | 27.13 | 95 | 1.06 |
| 1230 | 3.45 | 34.54 | 0.82 | 60 | 700 | 4.99 | 34.39 | 0.37 | 27.21 | 86 | 1.16 |
| | | | | | 800 | 4.58 | 34.43 | 0.41 | 27.29 | 79 | 1.25 |
| | | | | | 1000 | 4.01 | 34.47 | 0.59 | 27.39 | 70 | 1.42 |

a) Test cast.

SIO

CCOFI
5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

100.70 HORIZON; March 14, 1952; 1023 GCT; 30°20'N, 119°25'W; sounding, 1600 fm; wind, 280°, force 2; weather, cloudy; sea, rough; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.57 | 5.70 | | 0 | 15.6 | 33.57 | 5.70 | 24.76 | 320 | 0.00 |
| 10 | 15.51 | 33.60 | 5.72 | 316 | 10 | 15.51 | 33.60 | 5.72 | 24.80 | 316 | 0.03 |
| 24 | - | 33.57 | 5.71 | | 20 | 15.5 | 33.57 | 5.71 | 24.78 | 318 | 0.06 |
| 48 | - | 33.58 | 5.66 | | 30 | 15.5 | 33.57 | 5.69 | 24.78 | 318 | 0.10 |
| 72 | - | 33.58 | 5.70 | | 50 | 15.5 | 33.58 | 5.65 | 24.79 | 317 | 0.16 |
| 95 | 15.45 | 33.57 | 5.66 | 316 | 75 | 15.5 | 33.58 | 5.70 | 24.79 | 317 | 0.24 |
| 145 | 11.11 | 33.51 | 4.60 | 238 | 100 | 15.40 | 33.56 | 5.62 | 24.80 | 316 | 0.32 |
| 235 | 8.49 | 34.00 | 2.87 | 160 | 150 | 10.90 | 33.51 | 4.43 | 25.65 | 234 | 0.46 |
| 280 | 7.84 | 34.09 | 2.24 | 144 | 200 | 9.30 | 33.84 | 3.45 | 26.18 | 184 | 0.56 |
| 374 | 6.74 | 34.14 | 1.09 | 126 | 250 | 8.24 | 34.04 | 2.66 | 26.51 | 154 | 0.65 |
| 464 | 5.97 | 34.20 | 0.69 | 112 | 300 | 7.59 | 34.10 | 1.98 | 26.65 | 140 | 0.73 |
| 559 | 5.61 | 34.33 | 0.46 | 98 | 400 | 6.46 | 34.15 | 0.95 | 26.84 | 122 | 0.86 |
| 747 | 4.82 | 34.45 | 0.39 | 80 | 500 | 5.84 | 34.23 | 0.58 | 26.99 | 108 | 0.98 |
| 939 | 4.16 | 34.51 | 0.55 | 69 | 600 | 5.43 | 34.37 | 0.44 | 27.15 | 93 | 1.09 |
| 1139 | 3.56 | 34.55 | 0.64 | 60 | 700 | 5.00 | 34.43 | 0.41 | 27.25 | 83 | 1.19 |
| | | | | | 800 | 4.62 | 34.47 | 0.42 | 27.32 | 76 | 1.27 |
| | | | | | 1000 | 3.97 | 34.52 | 0.59 | 27.43 | 66 | 1.43 |

100.80 HORIZON; March 14, 1952; 0442 GCT; 29°56'N, 120°05'W; sounding, 2200 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.37 | 5.80 | | 0 | 15.0 | 33.37 | 5.80 | 24.74 | 322 | 0.00 |
| 10 | 14.81 | 33.39 | 5.80 | 316 | 10 | 14.81 | 33.39 | 5.80 | 24.79 | 316 | 0.03 |
| 29 | - | 33.39 | 5.80 | | 20 | 14.8 | 33.39 | 5.80 | 24.80 | 316 | 0.06 |
| 59 | - | 33.37 | 5.77 | | 30 | 14.8 | 33.39 | 5.80 | 24.80 | 316 | 0.10 |
| 89 | - | 33.26 | 5.45 | | 50 | 14.8 | 33.38 | 5.80 | 24.79 | 317 | 0.16 |
| 116 | 11.20 | 33.22 | 5.05 | 261 | 75 | 14.6 | 33.32 | 5.58 | 24.78 | 317 | 0.24 |
| 172 | 9.27 | 33.77 | 3.55 | 189 | 100 | 12.5 | 33.23 | 5.32 | 25.14 | 283 | 0.31 |
| 282 | 7.58 | 34.09 | 2.10 | 141 | 150 | 9.85 | 33.42 | 4.07 | 25.77 | 224 | 0.44 |
| 337 | 7.03 | 34.14 | 1.52 | 130 | 200 | 8.71 | 33.94 | 3.11 | 26.35 | 168 | 0.54 |
| 443 | 6.07 | 34.22 | 0.72 | 111 | 250 | 7.95 | 34.05 | 2.47 | 26.56 | 149 | 0.62 |
| 553 | 5.48 | 34.33 | 0.35 | 96 | 300 | 7.39 | 34.11 | 1.90 | 26.68 | 137 | 0.70 |
| 660 | 5.00 | 34.38 | 0.31 | 87 | 400 | 6.40 | 34.19 | 0.98 | 26.88 | 118 | 0.83 |
| 877 | 4.24 | 34.45 | 0.48 | 74 | 500 | 5.74 | 34.27 | 0.47 | 27.03 | 104 | 0.95 |
| 1092 | 3.66 | 34.51 | 0.72 | 64 | 600 | 5.25 | 34.36 | 0.31 | 27.16 | 91 | 1.05 |
| 1301 | 3.16 | 34.58 | 0.99 | 54 | 700 | 4.84 | 34.39 | 0.32 | 27.23 | 85 | 1.15 |
| | | | | | 800 | 4.49 | 34.43 | 0.40 | 27.30 | 78 | 1.23 |
| | | | | | 1000 | 3.89 | 34.48 | 0.62 | 27.41 | 68 | 1.40 |

100.90 HORIZON; March 13, 1952; 2230, 2254 GCT; 29°40'N, 120°47'W; sounding, 2150 fm; wind, 290°, force 4; weather, partly cloudy; sea, rough; wire angle, 31°, 42°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.90 | 33.31 | 5.85 | | 0 | 14.9 | 33.31 | 5.85 | 24.71 | 324 | 0.00 |
| 9 | 14.59 | 33.31 | 5.85 | 318 | 10 | 14.6 | 33.31 | 5.84 | 24.78 | 318 | 0.03 |
| | | | | | 20 | 14.6 | 33.31 | 5.82 | 24.78 | 318 | 0.06 |
| 18 | - | 33.31 | 5.82 | | 30 | 14.6 | 33.32 | 5.85 | 24.78 | 317 | 0.10 |
| 41 | - | 33.33 | 5.88 | | 50 | 14.4 | 33.32 | 5.88 | 24.83 | 313 | 0.16 |
| 60 | - | 33.31 | 5.88 | | 75 | 14.2 | 33.29 | 5.86 | 24.85 | 311 | 0.24 |
| 81 | 13.95 | 33.28 | 5.83 | 307 | 100 | 11.50 | 33.24 | 5.54 | 25.34 | 265 | 0.31 |
| 117 | 10.06 | 33.22 | 5.00 | 242 | 150 | 9.23 | 33.42 | 4.08 | 25.87 | 214 | 0.43 |
| 194 | 8.53 | 33.93 | 3.48 | 166 | 200 | 8.46 | 33.94 | 3.43 | 26.39 | 164 | 0.53 |
| 226 | 8.14 | 33.98 | 3.22 | 157 | 250 | 7.86 | 34.02 | 2.74 | 26.55 | 150 | 0.61 |
| 302 | 7.30 | 34.11 | 1.76 | 135 | 300 | 7.32 | 34.10 | 1.80 | 26.69 | 136 | 0.68 |
| 375 | 6.64 | 34.20 | 0.93 | 120 | 400 | 6.46 | 34.21 | 0.79 | 26.89 | 117 | 0.81 |
| 447 | 6.17 | 34.23 | 0.61 | 112 | 500 | 5.83 | 34.26 | 0.43 | 27.01 | 106 | 0.93 |
| 597 | 5.31 | 34.34 | 0.28 | 94 | 600 | 5.29 | 34.34 | 0.28 | 27.14 | 93 | 1.04 |
| 767 | 4.58 | 34.42 | 0.38 | 80 | 700 | 4.84 | 34.39 | 0.31 | 27.23 | 85 | 1.13 |
| 951 | 3.98 | 34.47 | 0.53 | 70 | 800 | 4.46 | 34.43 | 0.41 | 27.31 | 78 | 1.22 |
| | | | | | 1000 | (3.84) | (34.48) | (0.58) | (27.41) | (68) | (1.38) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

HORIZON; March 15, 1952; 1715 GCT; 30°45.5'N, 116°20.5'W; sounding, 43 fm; wind, 130°, force 4; weather, cloudy; sea, slight; wire angle, 01°. 105.32

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.58 | 33.29 | 6.13 | 299 | 0 | 13.58 | 33.29 | 6.13 | 24.97 | 299 | 0.00 |
| 10 | 13.52 | 33.28 | 6.21 | 299 | 10 | 13.52 | 33.28 | 6.21 | 24.98 | 299 | 0.03 |
| 20 | 13.09 | 33.33 | 6.06 | 287 | 20 | 13.09 | 33.33 | 6.06 | 25.10 | 287 | 0.06 |
| 30 | 11.54 | 33.37 | 4.88 | 256 | 30 | 11.54 | 33.37 | 4.88 | 25.43 | 256 | 0.09 |
| 50 | 10.90 | 33.57 | 3.82 | 230 | 50 | 10.90 | 33.57 | 3.82 | 25.70 | 230 | 0.14 |

HORIZON; March 15, 1952; 1926 GCT; 30°38'N, 116°33.5'W; sounding, 670 fm; wind, 140°, force 4; weather, drizzle; sea, moderate; wire angle, 14°. 105.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.28 | 5.97 | | 0 | 14.2 | 33.28 | 5.97 | 24.84 | 312 | 0.00 |
| 10 | 14.06 | 33.28 | 6.01 | 309 | 10 | 14.06 | 33.28 | 6.01 | 24.87 | 309 | 0.03 |
| 24 | - | 33.26 | 6.06 | | 20 | 14.0 | 33.26 | 6.05 | 24.86 | 310 | 0.06 |
| 48 | - | 33.30 | 5.36 | | 30 | 13.8 | 33.26 | 6.05 | 24.91 | 306 | 0.09 |
| 72 | - | 33.48 | 4.27 | | 50 | 12.6 | 33.30 | 5.29 | 25.18 | 280 | 0.15 |
| 96 | - | 33.69 | 3.63 | | 75 | 11.1 | 33.51 | 4.15 | 25.62 | 238 | 0.22 |
| 148 | 9.88 | 34.29 | 2.21 | 160 | 100 | 10.4 | 33.74 | 3.50 | 25.92 | 209 | 0.27 |
| 193 | 8.81 | 34.22 | 1.98 | 149 | 150 | 9.81 | 34.29 | 2.20 | 26.45 | 159 | 0.37 |
| 284 | 7.99 | 34.27 | 1.15 | 133 | 200 | 8.71 | 34.22 | 1.93 | 26.57 | 147 | 0.44 |
| 380 | 7.21 | 34.33 | 0.59 | 118 | 250 | 8.19 | 34.25 | 1.48 | 26.68 | 137 | 0.52 |
| 471 | 6.34 | 34.36 | 0.43 | 104 | 300 | 7.90 | 34.28 | 1.02 | 26.74 | 131 | 0.59 |
| 567 | 5.73 | 34.40 | 0.30 | 94 | 400 | 7.01 | 34.34 | 0.54 | 26.92 | 114 | 0.72 |
| 661 | 5.32 | 34.43 | 0.28 | 87 | 500 | 6.13 | 34.37 | 0.38 | 27.06 | 101 | 0.83 |
| 761 | 4.87 | 34.43 | 0.34 | 82 | 600 | 5.59 | 34.41 | 0.28 | 27.16 | 92 | 0.93 |
| 957 | 4.20 | 34.47 | 0.56 | 72 | 700 | 5.13 | 34.43 | 0.30 | 27.23 | 85 | 1.03 |
| | | | | | 800 | 4.71 | 34.44 | 0.38 | 27.29 | 80 | 1.12 |
| | | | | | 1000 | (4.08) | (34.48) | (0.61) | (27.39) | (70) | (1.29) |

HORIZON; March 15, 1952; 2344 GCT; 30°28.5'N, 116°54'W; sounding, 1360 fm; wind, 160°, force 4; weather, cloudy; sea, rough; wire angle, 37°. 105.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | - | 5.92 | | 0 | 15.1 | (33.37) | 5.92 | (24.72) | (324) | (0.00) |
| 8 | 14.76 | - | 5.90 | | 10 | 14.7 | (33.37) | 5.90 | (24.80) | (316) | (0.03) |
| 20 | - | 33.37 | 5.94 | | 20 | 14.6 | 33.37 | 5.94 | 24.82 | 314 | 0.06 |
| 44 | - | 33.40 | 5.94 | | 30 | 14.4 | 33.38 | 5.94 | 24.87 | 309 | 0.09 |
| 64 | - | 33.33 | 5.84 | | 50 | 14.5 | 33.39 | 5.93 | 24.86 | 310 | 0.16 |
| 86 | 11.93 | 33.35 | 4.60 | 264 | 75 | 12.6 | 33.33 | 5.35 | 25.20 | 278 | 0.23 |
| 126 | 10.10 | 33.68 | 3.60 | 209 | 100 | 11.30 | 33.42 | 4.12 | 25.51 | 248 | 0.30 |
| 203 | 8.79 | 34.05 | 2.36 | 161 | 150 | 9.63 | 33.85 | 3.22 | 26.14 | 189 | 0.41 |
| | | | | | 200 | 8.84 | 34.04 | 2.43 | 26.41 | 162 | 0.50 |

HORIZON; March 16, 1952; 0525 GCT; 30°04'N, 117°34.5'W; sounding, 580 fm; wind, 180°, force 5; weather, overcast; sea, very rough; wire angle, 35°. 105.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.35 | 5.83 | | 0 | 15.1 | 33.35 | 5.83 | 24.70 | 325 | 0.00 |
| 8 | 14.74 | 33.37 | 5.85 | 316 | 10 | 14.7 | 33.37 | 5.85 | 24.80 | 316 | 0.03 |
| 20 | - | 33.37 | 5.87 | | 20 | 14.6 | 33.37 | 5.87 | 24.82 | 314 | 0.06 |
| 41 | - | 33.28 | 5.96 | | 30 | 14.4 | 33.32 | 5.91 | 24.83 | 313 | 0.09 |
| 62 | - | 33.28 | 5.87 | | 50 | 14.3 | 33.28 | 5.93 | 24.82 | 314 | 0.16 |
| 81 | 12.08 | 33.36 | 4.79 | 266 | 75 | 13.2 | 33.32 | 5.35 | 25.07 | 290 | 0.23 |
| 125 | 9.96 | 33.57 | 4.00 | 215 | 100 | 11.70 | 33.45 | 4.37 | 25.46 | 253 | 0.30 |
| 159 | 9.28 | 33.82 | 3.33 | 185 | 150 | 9.42 | 33.75 | 3.49 | 26.09 | 193 | 0.41 |
| 230 | 8.65 | 33.98 | 2.52 | 164 | 200 | 8.83 | 33.93 | 2.87 | 26.33 | 170 | 0.51 |
| 304 | 8.04 | 34.25 | 1.24 | 135 | 250 | 8.52 | 34.04 | 2.15 | 26.46 | 158 | 0.59 |
| 378 | 7.33 | 34.27 | 0.77 | 124 | 300 | 8.08 | 34.25 | 1.29 | 26.69 | 136 | 0.67 |
| 459 | 6.65 | 34.29 | 0.50 | 113 | 400 | 7.15 | 34.28 | 0.69 | 26.85 | 121 | 0.80 |
| 539 | 6.08 | 34.34 | 0.34 | 103 | 500 | 6.34 | 34.31 | 0.41 | 26.99 | 108 | 0.92 |
| 628 | 5.59 | 34.40 | 0.26 | 92 | 600 | 5.74 | 34.39 | 0.28 | 27.12 | 95 | 1.03 |
| 811 | 4.66 | 34.43 | 0.40 | 80 | 700 | 5.21 | 34.41 | 0.29 | 27.20 | 87 | 1.13 |
| | | | | | 800 | 4.71 | 34.43 | 0.39 | 27.28 | 80 | 1.22 |

SIO

CCOFI 5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **105.60** | HORIZON; March 16, 1952; 1232 GCT; 29°37'N, 118°14.5'W; sounding, 1970 fm; wind, 260°, force 5; weather, partly cloudy; sea, very rough; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 33.60 | 5.65 | | 0 | 16.0 | 33.60 | 5.65 | 24.69 | 326 | 0.00 |
| 10 | 15.70 | 33.60 | 5.68 | 320 | 10 | 15.7 | 33.60 | 5.68 | 24.76 | 320 | 0.03 |
| 30 | - | 33.58 | 5.70 | | 20 | 15.7 | 33.59 | 5.70 | 24.75 | 320 | 0.06 |
| 60 | - | 33.62 | 5.66 | | 30 | 15.7 | 33.58 | 5.70 | 24.74 | 321 | 0.10 |
| 89 | - | 33.60 | 5.34 | | 50 | 15.7 | 33.61 | 5.69 | 24.77 | 319 | 0.16 |
| 118 | 12.98 | 33.40 | 5.23 | 280 | 75 | 15.7 | 33.61 | 5.50 | 24.77 | 319 | 0.24 |
| 175 | 9.82 | 33.64 | 3.89 | 207 | 100 | 15.7 | 33.60 | 5.29 | 24.76 | 320 | 0.32 |
| 286 | 8.08 | 34.10 | 2.11 | 147 | 150 | 10.71 | 33.50 | 4.82 | 25.68 | 232 | 0.46 |
| 342 | 7.59 | 34.13 | - | 138 | 200 | 9.29 | 33.80 | 3.22 | 26.15 | 187 | 0.57 |
| 448 | 6.65 | 34.25 | 1.56 | 116 | 250 | 8.49 | 34.02 | 2.41 | 26.45 | 159 | 0.66 |
| 560 | 5.94 | 34.29 | 0.67 | 105 | 300 | 7.95 | 34.11 | 2.06 | 26.60 | 144 | 0.73 |
| 668 | 5.29 | 34.35 | 0.39 | 93 | 400 | 7.11 | 34.19 | 1.82 | 26.79 | 127 | 0.88 |
| 888 | 4.30 | 34.45 | 0.30 | 75 | 500 | 6.28 | 34.27 | 1.09 | 26.96 | 110 | 1.00 |
| 1103 | 3.82 | 34.49 | 0.69 | 67 | 600 | 5.71 | 34.31 | 0.53 | 27.07 | 100 | 1.11 |
| 1314 | 3.22 | 34.52 | 0.96 | 59 | 700 | 5.10 | 34.37 | 0.37 | 27.19 | 89 | 1.22 |
| | | | | | 800 | 4.62 | 34.42 | 0.30 | 27.28 | 80 | 1.31 |
| | | | | | 1000 | 4.00 | 34.47 | 0.45 | 27.39 | 70 | 1.48 |
| **105.70** | HORIZON; March 16, 1952; 2048 GCT; 29°33'N, 118°50'W; sounding, 1900 fm; wind, 250°, force 6; weather, intermittent light rain; sea, very rough; wire angle, 16°. | | | | | | | | | | |
| 0 | - | 33.49 | 5.75 | | 0 | 15.8 | 33.49 | 5.75 | 24.65 | 330 | 0.00 |
| 10 | 15.45 | 33.46 | 5.74 | 325 | 10 | 15.45 | 33.46 | 5.74 | 24.71 | 325 | 0.03 |
| 29 | - | 33.46 | 5.78 | | 20 | 15.4 | 33.46 | 5.78 | 24.72 | 323 | 0.07 |
| 58 | - | 33.49 | 5.74 | | 30 | 15.4 | 33.46 | 5.78 | 24.72 | 323 | 0.10 |
| 85 | - | 33.49 | 5.71 | | 50 | 15.4 | 33.49 | 5.76 | 24.74 | 321 | 0.16 |
| 114 | 14.44 | 33.44 | 5.51 | 305 | 75 | 15.4 | 33.49 | 5.73 | 24.74 | 321 | 0.24 |
| 167 | 10.64 | 33.55 | 4.36 | 227 | 100 | 15.4 | 33.47 | 5.62 | 24.73 | 323 | 0.32 |
| 272 | 8.46 | 34.05 | 2.67 | 156 | 150 | 11.47 | 33.48 | 4.84 | 25.53 | 246 | 0.47 |
| | | | | | 200 | 9.69 | 33.74 | 3.79 | 26.04 | 198 | 0.58 |
| | | | | | 250 | 8.79 | 33.97 | 3.13 | 26.37 | 167 | 0.67 |
| **105.80** | HORIZON; March 17, 1952; 0300 GCT; 29°21'N, 119°27'W; sounding, 2000 fm; wind, 310°, force 7; weather, cloudy; sea, high; wire angle, 32°. | | | | | | | | | | |
| 0 | - | 33.51 | 5.73 | | 0 | 15.7 | 33.51 | 5.73 | 24.69 | 326 | 0.00 |
| 8 | 15.54 | 33.48 | 5.72 | 325 | 10 | 15.5 | 33.48 | 5.72 | 24.71 | 324 | 0.03 |
| 26 | - | 33.53 | 5.71 | | 20 | 15.5 | 33.52 | 5.71 | 24.74 | 321 | 0.06 |
| 51 | - | 33.49 | 5.90 | | 30 | 15.5 | 33.53 | 5.73 | 24.75 | 320 | 0.10 |
| 76 | - | 33.53 | 5.73 | | 50 | 15.5 | 33.49 | 5.90 | 24.72 | 323 | 0.16 |
| 103 | 14.70 | 33.55 | 5.38 | 302 | 75 | 15.5 | 33.53 | 5.74 | 24.75 | 320 | 0.24 |
| 155 | 10.22 | 33.56 | 4.52 | 219 | 100 | 14.7 | 33.55 | 5.42 | 24.94 | 302 | 0.32 |
| 263 | 8.36 | 34.04 | 2.47 | 155 | 150 | 10.44 | 33.55 | 4.62 | 25.77 | 224 | 0.45 |
| | | | | | 200 | 9.05 | 33.86 | 3.68 | 26.24 | 179 | 0.56 |
| | | | | | 250 | 8.43 | 34.02 | 2.71 | 26.46 | 158 | 0.64 |
| **110.35** | CREST; March 16, 1952; 0211 GCT; 29°45.5'N, 115°58'W; sounding, 750 fm; wind, 200°, force 4; weather, overcast; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | - | 33.40 | 5.75 | | 0 | 15.00 | 33.40 | 5.75 | 24.76 | 320 | 0.00 |
| 10 | 14.80 | 33.42 | 5.88 | 314 | 10 | 14.80 | 33.42 | 5.88 | 24.82 | 314 | 0.03 |
| 25 | - | 33.40 | 5.81 | | 20 | (14.60) | 33.41 | 5.82 | (24.85) | (311) | (0.06) |
| 50 | - | 33.35 | 5.86 | | 30 | (14.20) | 33.38 | 5.82 | (24.91) | (305) | (0.09) |
| 75 | - | 33.49 | 4.35 | | 50 | (13.00) | 33.35 | 5.86 | (25.14) | (284) | (0.15) |
| 99 | 10.52 | 33.66 | 3.59 | 217 | 75 | (11.30) | 33.49 | 4.35 | (25.57) | (243) | (0.22) |
| 151 | 10.40 | 34.25 | 1.44 | 171 | 100 | 10.52 | 33.66 | 3.55 | 25.84 | 217 | (0.28) |
| 245 | 9.33 | 34.42 | 0.82 | 142 | 150 | 10.41 | 34.25 | 1.48 | 26.32 | 172 | (0.38) |
| 291 | 8.86 | 34.36 | 0.73 | 139 | 200 | 9.96 | 34.42 | 1.01 | 26.53 | 152 | (0.46) |
| 390 | 7.47 | 34.36 | 0.52 | 119 | 250 | 9.28 | 34.42 | 0.82 | 26.64 | 141 | (0.53) |
| 483 | 6.60 | 34.36 | 0.40 | 108 | 300 | 8.74 | 34.36 | 0.72 | 26.68 | 137 | (0.61) |
| 580 | 5.86 | 34.42 | 0.33 | 94 | 400 | 7.36 | 34.36 | 0.50 | 26.89 | 118 | (0.74) |
| 774 | 4.72 | 34.47 | 0.40 | 77 | 500 | 6.46 | 34.36 | 0.39 | 27.01 | 106 | (0.86) |
| 964 | 4.15 | 34.49 | 0.59 | 70 | 600 | 5.74 | 34.43 | 0.33 | 27.16 | 92 | (0.96) |
| 1165 | 3.63 | 34.52 | 0.77 | 63 | 700 | 5.09 | 34.46 | 0.37 | 27.26 | 82 | (1.06) |
| | | | | | 800 | 4.62 | 34.47 | 0.42 | 27.32 | 76 | (1.15) |
| | | | | | 1000 | 4.06 | 34.50 | 0.61 | 27.40 | 68 | (1.31) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

CREST; March 16, 1952; 0518 GCT; 29°36'N, 116°19'W; sounding, 1320 fm; wind, 180°, force 4; weather, partly cloudy; sea, slight; wire angle, 16°. 1 10.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.35 | 5.85 | | 0 | 14.9 | 33.35 | 5.85 | 24.74 | 321 | 0.00 |
| 9 | 14.73 | 33.37 | 5.79 | 316 | 10 | 14.7 | 33.37 | 5.79 | 24.80 | 316 | 0.03 |
| 24 | - | 33.33 | 5.80 | | 20 | 14.7 | 33.34 | 5.79 | 24.78 | 318 | 0.06 |
| 48 | - | 33.40 | 5.75 | | 30 | 14.5 | 33.33 | 5.80 | 24.81 | 314 | 0.10 |
| 71 | - | 33.30 | 5.25 | | 50 | 14.5 | 33.40 | 5.74 | 24.87 | 309 | 0.16 |
| 93 | 10.95 | 33.42 | 4.40 | 242 | 75 | 12.6 | 33.30 | 5.07 | 25.18 | 280 | 0.23 |
| 142 | 9.78 | 33.84 | 3.19 | 192 | 100 | 11.00 | 33.47 | 4.18 | 25.61 | 239 | 0.30 |
| 228 | 8.80 | 34.20 | 2.14 | 150 | 150 | 9.67 | 33.90 | 3.08 | 26.17 | 186 | 0.40 |
| 274 | 8.20 | 34.20 | 1.55 | 141 | 200 | 9.11 | 34.17 | 2.50 | 26.47 | 157 | 0.49 |
| 367 | 7.28 | 34.33 | 0.82 | 119 | 250 | 8.53 | 34.20 | 1.86 | 26.59 | 146 | 0.57 |
| 457 | 6.46 | 34.29 | 0.51 | 111 | 300 | 7.94 | 34.22 | 1.31 | 26.69 | 136 | 0.64 |
| 548 | 6.08 | 34.36 | 0.34 | 101 | 400 | 6.96 | 34.32 | 0.68 | 26.91 | 115 | 0.77 |
| 734 | 4.88 | 34.42 | 0.35 | 83 | 500 | 6.29 | 34.32 | 0.42 | 27.00 | 107 | 0.89 |
| 919 | 4.18 | 34.47 | 0.56 | 72 | 600 | 5.74 | 34.39 | 0.34 | 27.12 | 95 | 1.00 |
| 1119 | 3.67 | 34.51 | 0.72 | 64 | 700 | 5.09 | 34.41 | 0.35 | 27.22 | 86 | 1.10 |
| | | | | | 800 | 4.59 | 34.44 | 0.40 | 27.30 | 78 | 1.19 |
| | | | | | 1000 | 3.97 | 34.49 | 0.63 | 27.41 | 68 | 1.35 |

CREST; March 16, 1952; 1047 GCT; 29°17'N, 116°59'W; sounding, 1700 fm; wind, 290°, force 4; weather, intermittent rain; sea, rough; wire angle, 38°. 1 10.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.33 | 5.72 | | 0 | 14.6 | 33.33 | 5.72 | 24.79 | 316 | 0.00 |
| 8 | 14.54 | 33.30 | 5.47 | 317 | 10 | 14.5 | 33.30 | 5.47 | 24.79 | 317 | 0.03 |
| 19 | - | 33.33 | 5.55 | | 20 | 14.5 | 33.33 | 5.56 | 24.81 | 314 | 0.06 |
| 44 | - | 33.32 | 5.56 | | 30 | 14.5 | 33.33 | 5.56 | 24.81 | 314 | 0.09 |
| 63 | - | 33.31 | 5.48 | | 50 | 14.5 | 33.32 | 5.55 | 24.81 | 315 | 0.16 |
| 88 | 11.68 | 33.24 | 5.04 | 268 | 75 | 13.5 | 33.28 | 5.32 | 24.98 | 298 | 0.24 |
| 130 | 10.34 | 33.69 | 3.99 | 212 | 100 | 11.20 | 33.30 | 4.73 | 25.44 | 255 | 0.30 |
| 218 | 9.06 | 34.16 | 1.99 | 157 | 150 | 10.00 | 33.85 | 3.43 | 26.07 | 194 | 0.42 |
| 259 | 8.64 | 34.18 | 1.59 | 149 | 200 | 9.26 | 34.12 | 2.24 | 26.41 | 163 | 0.51 |
| 348 | 7.67 | 34.23 | 0.94 | 131 | 250 | 8.75 | 34.17 | 1.68 | 26.53 | 151 | 0.59 |
| 433 | 6.61 | 34.25 | 0.67 | 116 | 300 | 8.21 | 34.21 | 1.26 | 26.64 | 141 | 0.67 |
| 519 | 5.79 | 34.31 | 0.55 | 101 | 400 | 7.02 | 34.24 | 0.75 | 26.84 | 122 | 0.80 |
| 690 | 5.00 | 34.38 | 0.45 | 87 | 500 | 5.95 | 34.30 | 0.58 | 27.03 | 104 | 0.92 |
| 875 | 4.31 | 34.47 | 0.50 | 73 | 600 | 5.35 | 34.34 | 0.50 | 27.13 | 94 | 1.03 |
| 1067 | 3.78 | 34.51 | 0.72 | 65 | 700 | 4.96 | 34.39 | 0.46 | 27.22 | 86 | 1.13 |
| | | | | | 800 | 4.58 | 34.44 | 0.48 | 27.30 | 78 | 1.22 |
| | | | | | 1000 | 3.94 | 34.50 | 0.64 | 27.42 | 67 | 1.38 |

CREST; March 16, 1952; 1625 GCT; 28°54.5'N, 117°39'W; sounding, 2150 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 19°. 1 10.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.40 | - | | 0 | 15.1 | 33.40 | | 24.74 | 322 | 0.00 |
| 9 | 14.93 | 33.39 | - | 319 | 10 | 14.9 | 33.39 | | 24.77 | 318 | 0.03 |
| 23 | - | 33.39 | 5.69 | | 20 | 14.9 | 33.39 | | 24.77 | 318 | 0.06 |
| 52 | - | 33.40 | 5.68 | | 30 | 15.0 | 33.39 | 5.69 | 24.75 | 320 | 0.10 |
| 74 | - | 33.39 | 5.62 | | 50 | 14.8 | 33.40 | 5.68 | 24.80 | 315 | 0.16 |
| 100 | 12.54 | 33.24 | 5.31 | 283 | 75 | 14.7 | 33.39 | 5.62 | 24.82 | 314 | 0.24 |
| 145 | 10.88 | 33.75 | 3.45 | 216 | 100 | 12.54 | 33.24 | 5.31 | 25.14 | 283 | 0.31 |
| 226 | 9.04 | 34.14 | 2.31 | 158 | 150 | 10.72 | 33.79 | 3.36 | 25.90 | 211 | 0.44 |
| 262 | 8.42 | 34.11 | 2.21 | 151 | 200 | 9.56 | 34.09 | 2.51 | 26.34 | 170 | 0.54 |
| 342 | 7.28 | 34.14 | 1.41 | 133 | 250 | 8.61 | 34.12 | 2.24 | 26.51 | 153 | 0.62 |
| 419 | 6.62 | 34.23 | 0.94 | 118 | 300 | 7.87 | 34.12 | 1.89 | 26.62 | 142 | 0.69 |
| 496 | 6.50 | 34.34 | 0.47 | 108 | 400 | 6.69 | 34.20 | 1.07 | 26.85 | 121 | 0.83 |
| 645 | 5.47 | 34.40 | 0.30 | 91 | 500 | 6.49 | 34.35 | 0.47 | 27.00 | 107 | 0.95 |
| 795 | 4.76 | 34.47 | 0.38 | 78 | 600 | 5.86 | 34.39 | 0.33 | 27.11 | 96 | 1.06 |
| 948 | 4.26 | 34.47 | 0.47 | 73 | 700 | 5.14 | 34.43 | 0.32 | 27.23 | 85 | 1.16 |
| | | | | | 800 | 4.75 | 34.47 | 0.39 | 27.31 | 78 | 1.25 |
| | | | | | 1000 | (4.10) | (34.47) | | (27.38) | (71) | (1.42) |

SIO

CCOFI 5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **110.70** | CREST; March 16, 1952; 2226 GCT; 28°36'N, 118°18'W; sounding, 1800 fm; wind, 260°, force 6; weather, cloudy; sea, very rough; wire angle, 35°. | | | | | | | | | | |
| 0 | - | 33.62 | 5.53 | | 0 | 16.1 | 33.62 | 5.53 | 24.68 | 327 | 0.00 |
| 8 | 15.85 | 33.62 | 5.41 | 321 | 10 | 15.9 | 33.62 | 5.42 | 24.73 | 322 | 0.03 |
| 21 | - | 33.62 | 5.49 | | 20 | 15.9 | 33.62 | 5.49 | 24.73 | 322 | 0.06 |
| 45 | - | 33.62 | 5.50 | | 30 | 15.9 | 33.62 | 5.50 | 24.73 | 322 | 0.10 |
| 66 | - | 33.60 | 5.57 | | 50 | 15.9 | 33.62 | 5.51 | 24.73 | 322 | 0.16 |
| 88 | 15.86 | 33.62 | 5.42 | 322 | 75 | 15.9 | 33.61 | 5.54 | 24.72 | 323 | 0.24 |
| 131 | 13.28 | 33.46 | 4.76 | 281 | 100 | 15.90 | 33.60 | 5.26 | 24.71 | 324 | 0.32 |
| 220 | 10.00 | 34.05 | 2.32 | 180 | 150 | 11.53 | 33.48 | 4.35 | 25.52 | 247 | 0.47 |
| 258 | 9.40 | 34.22 | 1.83 | 158 | 200 | 10.34 | 33.73 | 2.73 | 25.92 | 209 | 0.58 |
| 347 | - | 34.25 | 1.18 | | 250 | 9.53 | 34.21 | 1.92 | 26.43 | 160 | 0.68 |
| 430 | 7.46 | 34.31 | 0.66 | 123 | 300 | 8.82 | 34.25 | 1.49 | 26.58 | 147 | 0.76 |
| 516 | 6.94 | 34.33 | 0.41 | 114 | 400 | 7.70 | 34.29 | 0.84 | 26.78 | 127 | 0.90 |
| 683 | 5.33 | 34.38 | 0.30 | 91 | 500 | 7.06 | 34.33 | 0.44 | 26.90 | 116 | 1.03 |
| 865 | 4.51 | 34.42 | 0.39 | 79 | 600 | 6.11 | 34.35 | 0.32 | 27.05 | 102 | 1.15 |
| 1057 | 3.84 | 34.49 | 0.62 | 67 | 700 | 5.25 | 34.39 | 0.30 | 27.18 | 89 | 1.25 |
| | | | | | 800 | 4.77 | 34.41 | 0.34 | 27.26 | 82 | 1.35 |
| | | | | | 1000 | 4.04 | 34.47 | 0.54 | 27.38 | 70 | 1.52 |
| **113.30** | CREST; March 15, 1952; 2113 GCT; 29°22'N, 115°17'W; sounding, 30 fm; wind, 120°, force 1; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 14.07 | 33.53 | 5.96 | 291 | 0 | 14.07 | 33.53 | 5.96 | 25.06 | 291 | 0.00 |
| 10 | 13.50 | 33.53 | 5.80 | 280 | 10 | 13.50 | 33.53 | 5.80 | 25.17 | 280 | 0.03 |
| 20 | 13.46 | 33.53 | 5.44 | 279 | 20 | 13.46 | 33.53 | 5.44 | 25.18 | 279 | 0.06 |
| 30 | 13.46 | 33.55 | 5.40 | 278 | 30 | 13.46 | 33.55 | 5.40 | 25.20 | 278 | 0.08 |
| **113.30** | BLACK DOUGLAS; April 3, 1952; 0007 GCT; 29°22.5'N, 115°17.5'W; sounding, 33 fm; wind, 300°, force 7; weather, cloudy; sea, very rough; wire angle, 12°. | | | | | | | | | | |
| 0 | 13.98 | 33.58 | | 286 | 0 | 13.98 | 33.58 | | 25.11 | 286 | 0.00 |
| 10 | 13.96 | 33.58 | | 285 | 10 | 13.96 | 33.58 | | 25.12 | 285 | 0.03 |
| 20 | 13.79 | 33.57 | | 283 | 20 | 13.79 | 33.57 | | 25.15 | 283 | 0.06 |
| 30 | 12.31 | 33.53 | | 258 | 30 | 12.31 | 33.53 | | 25.41 | 258 | 0.08 |
| 49 | 11.29 | 33.75 | | 223 | 50 | (11.29) | (33.75) | | (25.77) | (223) | (0.13) |
| **113.35** | CREST; March 15, 1952; 1756 GCT; 29°07'N, 115°36'W; sounding, 950 fm; wind, 150°, force 2; weather, distant precipitation; sea, slight; wire angle, 06°. | | | | | | | | | | |
| 0 | - | 33.22 | 5.86 | | 0 | 14.4 | 33.22 | 5.86 | 24.75 | 320 | 0.00 |
| 10 | 14.04 | 33.30 | 5.94 | 307 | 10 | 14.04 | 33.30 | 5.94 | 24.89 | 307 | 0.03 |
| 25 | - | 33.26 | 5.77 | | 20 | 14.0 | 33.27 | 5.84 | 24.87 | 309 | 0.06 |
| 50 | - | 33.33 | 5.60 | | 30 | 14.0 | 33.26 | 5.74 | 24.86 | 310 | 0.09 |
| 74 | - | 33.46 | 4.40 | | 50 | 12.8 | 33.33 | 5.60 | 25.16 | 281 | 0.15 |
| 98 | 10.32 | 33.62 | 3.97 | 217 | 75 | 11.5 | 33.46 | 4.38 | 25.51 | 248 | 0.22 |
| 150 | 9.52 | 34.00 | 2.84 | 176 | 100 | 10.40 | 33.64 | 3.95 | 25.84 | 216 | 0.28 |
| 243 | 9.22 | 34.34 | 1.00 | 146 | 150 | 9.52 | 34.00 | 2.84 | 26.27 | 176 | 0.38 |
| 291 | 8.74 | 34.36 | 0.84 | 137 | 200 | 9.37 | 34.24 | 1.50 | 26.48 | 156 | 0.46 |
| 387 | 7.60 | 34.40 | 0.51 | 118 | 250 | 9.18 | 34.35 | 0.98 | 26.60 | 145 | 0.54 |
| 479 | 6.68 | 34.34 | 0.37 | 110 | 300 | 8.64 | 34.36 | 0.82 | 26.69 | 136 | 0.61 |
| 579 | 5.82 | 34.38 | 0.30 | 97 | 400 | 7.47 | 34.39 | 0.49 | 26.89 | 117 | 0.74 |
| 771 | 4.79 | 34.40 | 0.33 | 83 | 500 | 6.49 | 34.35 | 0.35 | 27.00 | 107 | 0.86 |
| 962 | 4.03 | 34.49 | 0.65 | 69 | 600 | 5.67 | 34.39 | 0.30 | 27.13 | 94 | 0.97 |
| 1165 | 3.54 | 34.54 | 0.78 | 60 | 700 | 5.13 | 34.39 | 0.32 | 27.20 | 88 | 1.07 |
| | | | | | 800 | 4.66 | 34.40 | 0.36 | 27.26 | 82 | 1.16 |
| | | | | | 1000 | 3.94 | 34.50 | 0.68 | 27.42 | 67 | 1.33 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| BLACK DOUGLAS; April 2, 1952; 2046 GCT; 29°12'N, 115°39'W; sounding, 800 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 20°. | | | | | | | | | | | 113.35 |
| 0 | 14.80 | 33.35 | | 319 | 0 | 14.80 | 33.35 | | 24.76 | 319 | 0.00 |
| 10 | 14.76 | 33.37 | | 317 | 10 | 14.76 | 33.37 | | 24.79 | 317 | 0.03 |
| 24 | 14.80 | 33.37 | | 318 | 20 | 14.80 | 33.37 | | 24.78 | 318 | 0.06 |
| 53 | 14.40 | 33.40 | | 307 | 30 | 14.60 | 33.37 | | 24.82 | 314 | 0.10 |
| 77 | 11.50 | 33.42 | | 251 | 50 | 14.40 | 33.40 | | 24.89 | 307 | 0.16 |
| 104 | 10.38 | 33.62 | | 218 | 75 | 11.50 | 33.42 | | 25.48 | 251 | 0.23 |
| | | | | | 100 | 10.50 | 33.49 | | 25.71 | 229 | 0.29 |
| CREST; March 15, 1952; 1458 GCT; 29°03'N, 115°57'W; sounding, 1000 fm; wind, 280°, force 1; weather, partly cloudy; sea, slight; wire angle, 04°. | | | | | | | | | | | 113.40 |
| 0 | - | 33.46 | 5.68 | | 0 | 15.4 | 33.46 | 5.68 | 24.72 | 323 | 0.00 |
| 10 | 15.14 | 33.44 | 5.69 | 320 | 10 | 15.14 | 33.44 | 5.69 | 24.76 | 320 | 0.03 |
| 25 | - | 33.40 | 5.77 | | 20 | 15.0 | 33.41 | 5.74 | 24.77 | 319 | 0.06 |
| 50 | - | 33.42 | 5.68 | | 30 | 15.0 | 33.41 | 5.77 | 24.77 | 319 | 0.10 |
| 75 | - | 33.40 | 5.72 | | 50 | 15.0 | 33.42 | 5.68 | 24.78 | 318 | 0.16 |
| 99 | 12.55 | 33.48 | 4.57 | 266 | 75 | 15.0 | 33.40 | 5.72 | 24.76 | 320 | 0.24 |
| 151 | 9.90 | 33.75 | 3.55 | 200 | 100 | 12.50 | 33.49 | 4.48 | 25.34 | 264 | 0.31 |
| 246 | 9.01 | 34.20 | 1.80 | 153 | 150 | 9.91 | 33.75 | 3.57 | 26.01 | 200 | 0.43 |
| 292 | 8.33 | 34.23 | 1.19 | 141 | 200 | 9.46 | 34.05 | 2.77 | 26.32 | 171 | 0.53 |
| 392 | 7.63 | 34.31 | 0.64 | 125 | 250 | 8.93 | 34.20 | 1.71 | 26.52 | 152 | 0.61 |
| 486 | 6.74 | 34.36 | 0.37 | 109 | 300 | 8.26 | 34.23 | 1.14 | 26.65 | 140 | 0.68 |
| 585 | 5.88 | 34.36 | 0.28 | 99 | 400 | 7.58 | 34.32 | 0.62 | 26.82 | 124 | 0.82 |
| 779 | 4.88 | 34.43 | 0.38 | 82 | 500 | 6.61 | 34.36 | 0.34 | 26.99 | 108 | 0.94 |
| 971 | 4.15 | 34.49 | 0.56 | 70 | 600 | 5.77 | 34.36 | 0.28 | 27.10 | 97 | 1.05 |
| 1173 | - | 34.54 | 0.87 | | 700 | 5.21 | 34.40 | 0.32 | 27.20 | 88 | 1.15 |
| | | | | | 800 | 4.73 | 34.43 | 0.40 | 27.27 | 81 | 1.25 |
| | | | | | 1000 | 4.05 | 34.50 | 0.60 | 27.41 | 68 | 1.41 |
| BLACK DOUGLAS; April 2, 1952; 1642 GCT; 29°02'N, 115°58.5'W; sounding, 500 fm; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 07°. | | | | | | | | | | | 113.40 |
| 0 | - | 33.36 | | | 0 | 14.8 | 33.36 | | 24.77 | 318 | 0.00 |
| 10 | 14.74 | 33.37 | | 316 | 10 | 14.74 | 33.37 | | 24.79 | 316 | 0.03 |
| 25 | - | 33.33 | | | 20 | 14.7 | 33.34 | | 24.78 | 318 | 0.06 |
| 55 | - | 33.33 | | | 30 | 14.5 | 33.33 | | 24.81 | 314 | 0.10 |
| 79 | - | 33.24 | | | 50 | 14.0 | 33.33 | | 24.92 | 304 | 0.16 |
| 108 | 10.62 | 33.40 | | 238 | 75 | 13.0 | 33.24 | | 25.05 | 292 | 0.23 |
| 158 | 9.65 | 33.91 | | 184 | 100 | 11.1 | 33.32 | | 25.47 | 252 | 0.30 |
| 208 | 9.22 | 34.11 | | 163 | 150 | 9.71 | 33.84 | | 26.12 | 191 | 0.41 |
| 264 | 8.18 | 34.16 | | 144 | 200 | 9.31 | 34.10 | | 26.38 | 165 | 0.50 |
| 309 | 7.89 | 34.17 | | 139 | 250 | 8.42 | 34.15 | | 26.56 | 148 | 0.58 |
| 416 | 6.76 | 34.31 | | 113 | 300 | 7.94 | 34.17 | | 26.65 | 140 | 0.66 |
| 521 | 6.14 | 34.38 | | 100 | 400 | 6.88 | 34.28 | | 26.89 | 117 | 0.79 |
| 628 | 5.48 | 34.40 | | 91 | 500 | 6.28 | 34.37 | | 27.04 | 103 | 0.91 |
| | | | | | 600 | 5.63 | 34.40 | | 27.15 | 93 | 1.01 |
| CREST; March 15, 1952; 0941 GCT; 28°42'N, 116°38'W; sounding, 2000 fm; wind, 220°, force 2; weather, drizzle; sea, moderate; wire angle, 03°. | | | | | | | | | | | 113.50 |
| 0 | - | 33.48 | 5.68 | | 0 | 15.6 | 33.48 | 5.68 | 24.69 | 326 | 0.00 |
| 10 | 15.36 | 33.51 | 5.75 | 319 | 10 | 15.36 | 33.51 | 5.75 | 24.77 | 319 | 0.03 |
| 25 | - | 33.54 | 5.62 | | 20 | 15.3 | 33.54 | 5.67 | 24.80 | 316 | 0.06 |
| 50 | - | 33.51 | 5.94 | | 30 | 15.2 | 33.54 | 5.63 | 24.82 | 313 | 0.10 |
| 75 | - | 33.53 | 5.70 | | 50 | 15.2 | 33.51 | 5.94 | 24.80 | 316 | 0.16 |
| 99 | 15.17 | 33.46 | 5.66 | 319 | 75 | 15.2 | 33.53 | 5.70 | 24.82 | 314 | 0.24 |
| 151 | 11.25 | 33.60 | 3.90 | 234 | 100 | 15.00 | 33.46 | 5.66 | 24.81 | 315 | 0.32 |
| 248 | 9.21 | 34.16 | 2.00 | 159 | 150 | 11.29 | 33.59 | 3.93 | 25.65 | 235 | 0.46 |
| | | | | | 200 | 9.63 | 33.89 | 2.59 | 26.17 | 186 | 0.56 |
| | | | | | 250 | (9.22) | (34.16) | (2.01) | (26.45) | (159) | (0.65) |

SIO

CCOFI 5203

| | OBSERVED | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 113.50 | BLACK DOUGLAS; April 2, 1952; 1024, 1051 GCT; 28°42'N, 116°37.5'W; sounding, 1820 fm; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 23°, 22°. | | | | | | | | | | |
| 0 | - | 33.33 | | | 0 | 15.2 | 33.33 | | 24.66 | 329 | 0.00 |
| 9 | 15.18 | 33.37 | | 325 | 10 | 15.2 | 33.37 | | 24.69 | 326 | 0.03 |
| 23 | - | 33.36 | | | 20 | 15.2 | 33.36 | | 24.69 | 327 | 0.07 |
| 51 | - | 33.40 | | | 30 | 14.7 | 33.37 | | 24.80 | 316 | 0.10 |
| 72 | - | 33.33 | | | 50 | 14.4 | 33.40 | | 24.89 | 307 | 0.16 |
| 98 | 12.86 | 33.28 | | 286 | 75 | 14.1 | 33.32 | | 24.89 | 307 | 0.24 |
| | | | | | 100 | 12.40 | 33.29 | | 25.21 | 277 | 0.31 |
| 142 | 10.87 | 33.68 | | 221 | 150 | 10.41 | 33.73 | | 25.91 | 210 | 0.43 |
| 186 | 9.40 | 33.91 | | 181 | 200 | 9.20 | 33.98 | | 26.31 | 172 | 0.53 |
| 236 | 8.86 | 34.13 | | 156 | 250 | 8.80 | 34.19 | | 26.54 | 151 | 0.61 |
| 279 | 8.72 | 34.29 | | 142 | 300 | 8.56 | 34.31 | | 26.67 | 138 | 0.69 |
| 378 | 7.56 | 34.33 | | 122 | 400 | 7.35 | 34.33 | | 26.86 | 120 | 0.82 |
| 478 | 6.67 | 34.33 | | 111 | 500 | 6.51 | 34.34 | | 26.99 | 108 | 0.94 |
| 584 | 5.91 | 34.40 | | 96 | 600 | (5.80) | (34.40) | | (27.13) | (95) | (1.05) |
| 113.60 | CREST; March 15, 1952; 0506 GCT; 28°23.5'N, 117°13.5'W; sounding, 2000 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | - | 33.51 | 5.60 | | 0 | 15.9 | 33.51 | 5.60 | 24.65 | 330 | 0.00 |
| 10 | 15.36 | 33.46 | 5.64 | 323 | 10 | 15.36 | 33.46 | 5.64 | 24.73 | 323 | 0.03 |
| 25 | - | 33.44 | 5.74 | | 20 | 15.2 | 33.44 | 5.73 | 24.75 | 321 | 0.06 |
| 50 | - | 33.46 | 5.66 | | 30 | 15.2 | 33.44 | 5.73 | 24.75 | 321 | 0.10 |
| 75 | - | 33.46 | 5.74 | | 50 | 15.1 | 33.46 | 5.66 | 24.78 | 317 | 0.16 |
| 99 | 14.30 | 33.33 | 5.57 | 310 | 75 | 15.0 | 33.46 | 5.74 | 24.81 | 315 | 0.24 |
| 152 | 10.38 | 33.62 | 3.92 | 218 | 100 | 14.30 | 33.33 | 5.55 | 24.86 | 310 | 0.32 |
| 244 | 8.57 | 34.04 | 2.74 | 158 | 150 | 10.43 | 33.60 | 3.97 | 25.81 | 220 | 0.45 |
| 292 | 8.06 | 34.18 | 1.68 | 141 | 200 | 9.37 | 33.87 | 3.31 | 26.20 | 183 | 0.56 |
| 390 | 7.63 | 34.33 | 0.52 | 123 | 250 | 8.49 | 34.06 | 2.61 | 26.48 | 156 | 0.64 |
| 483 | 6.69 | 34.36 | 0.42 | 109 | 300 | 8.02 | 34.20 | 1.54 | 26.66 | 139 | 0.72 |
| 582 | 5.98 | 34.38 | 0.25 | 98 | 400 | 7.56 | 34.33 | 0.50 | 26.83 | 122 | 0.86 |
| 776 | 4.82 | 34.45 | 0.37 | 80 | 500 | 6.56 | 34.36 | 0.39 | 27.00 | 107 | 0.98 |
| 967 | 4.22 | 34.49 | 0.50 | 71 | 600 | 5.85 | 34.39 | 0.26 | 27.11 | 96 | 1.09 |
| 1170 | 3.56 | 34.51 | 0.98 | 63 | 700 | 5.19 | 34.43 | 0.31 | 27.22 | 86 | 1.18 |
| | | | | | 800 | 4.73 | 34.45 | 0.40 | 27.29 | 79 | 1.28 |
| | | | | | 1000 | 4.11 | 34.49 | 0.54 | 27.39 | 70 | 1.44 |
| 113.60 | BLACK DOUGLAS; April 2, 1952; 0427 GCT; 28°22'N, 117°16.5'W; sounding, 2080 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 17°. | | | | | | | | | | |
| 0 | - | 33.47 | | | 0 | 15.6 | 33.47 | | 24.68 | 327 | 0.00 |
| 10 | 15.55 | 33.48 | | 325 | 10 | 15.55 | 33.48 | | 24.70 | 325 | 0.03 |
| 24 | - | 33.45 | | | 20 | 15.2 | 33.46 | | 24.76 | 319 | 0.06 |
| 48 | - | 33.44 | | | 30 | 15.0 | 33.45 | | 24.80 | 316 | 0.10 |
| 71 | - | 33.39 | | | 50 | 14.9 | 33.44 | | 24.81 | 315 | 0.16 |
| 93 | 13.32 | 33.28 | | 295 | 75 | 14.5 | 33.36 | | 24.84 | 312 | 0.24 |
| 140 | 10.74 | 33.69a) | | 218 | 100 | 12.80 | 33.29 | | 25.13 | 284 | 0.31 |
| 181 | 9.93 | 33.96a) | | 185 | 150 | 10.52 | 33.80 | | 25.95 | 207 | 0.44 |
| 224 | 9.22 | 34.05 | | 167 | 200 | 9.63 | 34.00 | | 26.25 | 177 | 0.54 |
| 267 | 8.69 | 34.24 | | 145 | 250 | 8.88 | 34.21 | | 26.54 | 150 | 0.62 |
| 360 | 7.87 | 34.25 | | 133 | 300 | 8.38 | 34.25 | | 26.65 | 140 | 0.70 |
| 451 | 7.10 | 34.34 | | 116 | 400 | 7.55 | 34.28 | | 26.80 | 126 | 0.83 |
| 550 | 6.21 | 34.38 | | 101 | 500 | 6.68 | 34.36 | | 26.98 | 109 | 0.96 |

a) Salinity samples at 140 and 181 meters appear to have been reversed; they are assumed to be listed in correct order.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| BLACK DOUGLAS; April 1, 1952; 2249 GCT; 28°02'N, 117°55.5'W; sounding, 1720 fm; wind, 310°, force 2; weather, overcast; sea, rough; wire angle, 03°. | | | | | | | | | | | 113.70 |
| 0 | - | 33.57 | | | 0 | 16.3 | 33.57 | | 24.60 | 335 | 0.00 |
| 10 | 16.13 | 33.62 | | 327 | 10 | 16.13 | 33.62 | | 24.68 | 327 | 0.03 |
| 25 | - | 33.57 | | | 20 | 16.1 | 33.59 | | 24.66 | 329 | 0.07 |
| 50 | - | 33.62 | | | 30 | 16.0 | 33.57 | | 24.67 | 328 | 0.10 |
| 75 | - | 33.66 | | | 50 | 15.7 | 33.62 | | 24.77 | 318 | 0.16 |
| 99 | 15.69 | 33.58u | | | 75 | 15.7 | 33.66 | | 24.81 | 315 | 0.24 |
| 149 | 11.62 | 33.75 | | 229 | 100 | 15.70 | 33.76 | | 24.88 | 308 | 0.32 |
| 195 | 10.27 | 34.05 | | 184 | 150 | 11.61 | 33.76 | | 25.72 | 228 | 0.46 |
| 241 | 9.04 | 34.14 | | 158 | 200 | 10.10 | 34.07 | | 26.23 | 180 | 0.56 |
| 287 | 8.61 | 34.29 | | 140 | 250 | 8.95 | 34.16 | | 26.49 | 155 | 0.65 |
| 385 | 7.86 | 34.34 | | 126 | 300 | 8.50 | 34.31 | | 26.68 | 137 | 0.72 |
| 480 | 6.56 | 34.27 | | 114 | 400 | 7.67 | 34.34 | | 26.83 | 123 | 0.86 |
| 588 | 5.90 | 34.34 | | 100 | 500 | 6.39 | 34.28 | | 26.96 | 111 | 0.98 |
| | | | | | 600 | (5.87) | (34.35) | | (27.08) | (99) | (1.10) |
| CREST; March 14, 1952; 0611 GCT; 28°54'N, 114°44'W; sounding, 46 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 02°. | | | | | | | | | | | 117.26 |
| 0 | 14.34 | 33.71 | 5.94 | 283 | 0 | 14.34 | 33.71 | 5.94 | 25.14 | 283 | 0.00 |
| 10 | 14.32 | 33.71 | 5.88 | 283 | 10 | 14.32 | 33.71 | 5.88 | 25.14 | 283 | 0.03 |
| 20 | 14.32 | 33.69 | 5.86 | 284 | 20 | 14.32 | 33.69 | 5.86 | 25.13 | 284 | 0.06 |
| 30 | 14.30 | 33.68 | 5.80 | 285 | 30 | 14.30 | 33.68 | 5.80 | 25.12 | 285 | 0.09 |
| 50 | 13.84 | 33.68 | 5.13 | 276 | 50 | 13.84 | 33.68 | 5.13 | 25.22 | 276 | 0.14 |
| BLACK DOUGLAS; March 31, 1952; 1412 GCT; 28°56'N, 114°41'W; sounding, 43 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | | 117.26 |
| 0 | 14.52 | 33.48 | | 304 | 0 | 14.52 | 33.48 | | 24.92 | 304 | 0.00 |
| 10 | 14.39 | 33.48 | | 301 | 10 | 14.39 | 33.48 | | 24.95 | 301 | 0.03 |
| 20 | 13.55 | 33.48 | | 285 | 20 | 13.55 | 33.48 | | 25.13 | 285 | 0.06 |
| 30 | 12.39 | 33.48 | | 263 | 30 | 12.39 | 33.48 | | 25.36 | 263 | 0.09 |
| 50 | 10.98 | 33.59 | | 230 | 50 | 10.98 | 33.59 | | 25.70 | 230 | 0.14 |
| CREST; March 14, 1952; 0803 GCT; 28°48'N, 114°57'W; sounding, 56 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 04°. | | | | | | | | | | | 117.30 |
| 0 | 14.50 | 33.64 | 5.80 | 292 | 0 | 14.50 | 33.64 | 5.80 | 25.05 | 292 | 0.00 |
| 10 | 14.49 | 33.64 | 5.78 | 292 | 10 | 14.49 | 33.64 | 5.78 | 25.05 | 292 | 0.03 |
| 20 | 14.49 | 33.61 | 5.78 | 294 | 20 | 14.49 | 33.61 | 5.78 | 25.03 | 294 | 0.06 |
| 30 | 14.50 | 33.64 | 5.80 | 292 | 30 | 14.50 | 33.64 | 5.80 | 25.05 | 292 | 0.09 |
| 50 | 14.30 | 33.62 | 5.67 | 289 | 50 | 14.30 | 33.62 | 5.67 | 25.08 | 289 | 0.15 |
| 75 | 11.78 | 33.68 | 3.56 | 237 | 75 | 11.78 | 33.68 | 3.56 | 25.63 | 237 | 0.21 |
| BLACK DOUGLAS; March 31, 1952; 1623 GCT; 28°48'N, 114°56.5'W; sounding, 65 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | 117.30 |
| 0 | 14.40 | 33.58 | | 294 | 0 | 14.40 | 33.58 | | 25.03 | 294 | 0.00 |
| 10 | 14.22 | 33.58 | | 291 | 10 | 14.22 | 33.58 | | 25.06 | 291 | 0.03 |
| 20 | 13.06 | 33.50 | | 274 | 20 | 13.06 | 33.50 | | 25.24 | 274 | 0.06 |
| 30 | 11.98 | 33.42 | | 260 | 30 | 11.98 | 33.42 | | 25.39 | 260 | 0.08 |
| 50 | 10.98 | 33.58 | | 231 | 50 | 10.98 | 33.58 | | 25.69 | 231 | 0.13 |
| 75 | 10.15 | 33.78 | | 202 | 75 | 10.15 | 33.78 | | 25.99 | 202 | 0.19 |
| CREST; March 14, 1952; 1106 GCT; 28°36.5'N, 115°19'W; sounding, 115 fm; wind, 030°, force 2; weather, cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | | 117.35 |
| 0 | 15.12 | 33.69 | 5.70 | 301 | 0 | 15.12 | 33.69 | 5.70 | 24.96 | 301 | 0.00 |
| 10 | 15.12 | 33.68 | 5.65 | 302 | 10 | 15.12 | 33.68 | 5.65 | 24.95 | 302 | 0.03 |
| 20 | 15.11 | 33.64 | 5.70 | 304 | 20 | 15.11 | 33.64 | 5.70 | 24.92 | 304 | 0.06 |
| 30 | 15.11 | 33.66 | 5.65 | 303 | 30 | 15.11 | 33.66 | 5.65 | 24.94 | 303 | 0.09 |
| 50 | 15.12 | 33.69 | 5.70 | 301 | 50 | 15.12 | 33.69 | 5.70 | 24.96 | 301 | 0.15 |
| 75 | 12.25 | 33.57 | 4.11 | 254 | 75 | 12.25 | 33.57 | 4.11 | 25.45 | 254 | 0.22 |
| 100 | 10.27 | 33.80 | 3.27 | 203 | 100 | 10.27 | 33.80 | 3.27 | 25.99 | 203 | 0.28 |
| 125 | 10.20 | 33.91 | 2.83 | 193 | | | | | | | |

SIO

CCOFI 5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 117.40 | CREST; March 14, 1952; 1443 GCT; 28°27'N, 115°35'W; sounding, 470 fm; wind, 010°, force 2; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | - | 33.57 | 5.83 | | 0 | 14.8 | 33.57 | 5.83 | 24.93 | 303 | 0.00 |
| 10 | 14.69 | 33.62 | 5.79 | 297 | 10 | 14.69 | 33.62 | 5.79 | 25.00 | 297 | 0.03 |
| 50 | - | 33.64 | 5.72 | | 20 | 14.7 | 33.63 | 5.76 | 25.00 | 297 | 0.06 |
| 75 | - | 33.53 | 4.19 | | 30 | 14.7 | 33.64 | 5.75 | 25.01 | 296 | 0.09 |
| 99 | 10.34 | 33.68 | 3.63 | 213 | 50 | 14.6 | 33.64 | 5.72 | 25.03 | 294 | 0.15 |
| 152 | 9.78 | 33.89 | 3.16 | 188 | 75 | 11.3 | 33.53 | 4.19 | 25.60 | 240 | 0.22 |
| 197 | 9.49 | 34.29 | 1.35 | 154 | 100 | 10.30 | 33.70 | 3.62 | 25.91 | 210 | 0.27 |
| 244 | 9.39 | 34.43 | 0.71 | 142 | 150 | 9.80 | 33.88 | 3.17 | 26.13 | 189 | 0.37 |
| 290 | 8.80 | 34.40 | 0.56 | 135 | 200 | 9.49 | 34.31 | 1.28 | 26.52 | 152 | 0.46 |
| 389 | 8.02 | 34.40 | 0.47 | 124 | 250 | 9.35 | 34.43 | 0.68 | 26.64 | 141 | 0.54 |
| 483 | 6.90 | 34.40 | 0.31 | 108 | 300 | 8.67 | 34.40 | 0.55 | 26.72 | 133 | 0.61 |
| 583 | 5.87 | 34.38 | 0.33 | 97 | 400 | 7.92 | 34.40 | 0.45 | 26.84 | 122 | 0.74 |
| 680 | 5.30 | 34.42 | 0.31 | 88 | 500 | 6.67 | 34.40 | 0.33 | 27.01 | 105 | 0.86 |
| 783 | 4.79 | 34.42 | 0.45 | 82 | 600 | 5.75 | 34.38 | 0.33 | 27.12 | 96 | 0.97 |
| | | | | | 700 | 5.20 | 34.42 | 0.32 | 27.21 | 86 | 1.07 |
| | | | | | 800 | (4.71) | (34.42) | | (27.27) | (81) | (1.16) |
| 117.40 | BLACK DOUGLAS; March 31, 1952; 2220, 2238 GCT; 28°28'N, 115°35.5'W; sounding, 520 fm; wind, 290°, force 2; weather, overcast; sea, moderate; wire angle, 02°, 05°. | | | | | | | | | | |
| 0 | - | 33.40 | | | 0 | 15.4 | 33.40 | | 24.67 | 328 | 0.00 |
| 10 | 15.28 | 33.40 | | 325 | 10 | 15.28 | 33.40 | | 24.70 | 325 | 0.03 |
| 25 | - | 33.41 | | | 20 | 15.2 | 33.41 | | 24.72 | 323 | 0.07 |
| 49 | - | 33.40 | | | 30 | 14.6 | 33.41 | | 24.85 | 311 | 0.10 |
| 73 | - | 33.42 | | | 50 | 14.5 | 33.40 | | 24.87 | 309 | 0.16 |
| 97 | 11.67 | 33.35 | | 259 | 75 | 14.1 | 33.42 | | 24.97 | 300 | 0.24 |
| | | | | | 100 | 11.40 | 33.35 | | 25.44 | 255 | 0.31 |
| 147 | 9.65 | 33.87 | | 187 | 150 | 9.62 | 33.88 | | 26.16 | 186 | 0.42 |
| 193 | 9.53 | 34.09 | | 169 | 200 | 9.57 | 34.14 | | 26.37 | 166 | 0.51 |
| 238 | 9.70 | 34.43 | | 147 | 250 | 9.61 | 34.44 | | 26.60 | 145 | 0.59 |
| 284 | 9.06 | 34.43 | | 137 | 300 | 8.83 | 34.42 | | 26.71 | 134 | 0.66 |
| 382 | 7.94 | 34.36 | | 126 | 400 | 7.73 | 34.36 | | 26.83 | 123 | 0.79 |
| 477 | 6.92 | 34.41 | | 108 | 500 | 6.71 | 34.42 | | 27.02 | 105 | 0.91 |
| 580 | 6.04 | 34.43 | | 95 | 600 | (5.91) | (34.44) | | (27.14) | (93) | (1.02) |
| 117.50 | CREST; March 14, 1952; 1853, 1923 GCT; 28°08'N, 116°15'W; sounding, 2350 fm; wind, 220°, force 2; weather, cloudy; sea, slight; wire angle, 05°, 06°. | | | | | | | | | | |
| 0 | - | 33.53 | 5.65 | | 0 | 15.6 | 33.53 | 5.65 | 24.73 | 323 | 0.00 |
| 10 | 15.19 | 33.55 | 5.72 | 313 | 10 | 15.19 | 33.55 | 5.72 | 24.83 | 313 | 0.03 |
| 25 | - | 33.48 | 5.68 | | 20 | 15.1 | 33.50 | 5.69 | 24.81 | 314 | 0.06 |
| 50 | - | 33.51 | 5.76 | | 30 | 15.1 | 33.48 | 5.69 | 24.80 | 316 | 0.09 |
| | | | | | 50 | 14.8 | 33.51 | 5.76 | 24.89 | 307 | 0.16 |
| 74 | - | 33.49 | 5.41 | | 75 | 13.4 | 33.49 | 4.39 | 25.16 | 281 | 0.23 |
| 98 | 11.78 | 33.58 | 4.09 | 244 | 100 | 11.70 | 33.60 | 4.04 | 25.58 | 242 | 0.30 |
| 149 | 10.69 | 34.09 | 2.07 | 188 | 150 | 10.69 | 34.11 | 2.04 | 26.16 | 187 | 0.41 |
| 242 | 10.16 | 34.45 | 0.64 | 153 | 200 | 10.45 | 34.36 | 1.00 | 26.39 | 164 | 0.50 |
| 289 | 9.52 | 34.43 | 0.65 | 144 | 250 | 10.07 | 34.45 | 0.65 | 26.53 | 151 | 0.58 |
| 385 | 8.13 | 34.40 | 0.46 | 125 | 300 | 9.37 | 34.42 | 0.64 | 26.62 | 142 | 0.65 |
| 480 | 6.95 | - | 0.34 | | 400 | 7.92 | 34.39 | 0.45 | 26.83 | 123 | 0.79 |
| 577 | 6.00 | 34.40 | 0.30 | 97 | 500 | 6.74 | 34.36 | 0.34 | 26.97 | 109 | 0.92 |
| 769 | 4.89 | 34.46 | 0.30 | 80 | 600 | 5.84 | 34.41 | 0.30 | 27.13 | 95 | 1.02 |
| 959 | 4.12 | 34.49 | 0.57 | 70 | 700 | 5.25 | 34.44 | 0.30 | 27.22 | 85 | 1.12 |
| 1161 | 3.66 | 34.54 | 0.72 | 61 | 800 | 4.74 | 34.47 | 0.32 | 27.31 | 78 | 1.21 |
| | | | | | 1000 | 3.99 | 34.49 | 0.63 | 27.40 | 68 | 1.38 |

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5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| BLACK DOUGLAS; April 1, 1952; 0419 GCT; 28°08'N, 116°15'W; sounding, 2280 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 12°. | | | | | | | | | | | 117.50 |
| 0 | - | 33.48 | | | 0 | 15.8 | 33.48 | | 24.64 | 330 | 0.00 |
| 9 | 15.80 | 33.48 | | 330 | 10 | 15.8 | 33.48 | | 24.64 | 330 | 0.03 |
| 24 | - | 33.49 | | | 20 | 15.7 | 33.49 | | 24.67 | 328 | 0.07 |
| 48 | - | 33.48 | | | 30 | 15.5 | 33.49 | | 24.72 | 323 | 0.10 |
| 72 | - | 33.49 | | | 50 | 15.3 | 33.48 | | 24.76 | 320 | 0.16 |
| 96 | 13.02 | 33.48 | | 275 | 75 | 15.1 | 33.49 | | 24.81 | 315 | 0.24 |
| 146 | 11.19 | 33.96 | | 206 | 100 | 12.90 | 33.48 | | 25.26 | 272 | 0.32 |
| 190 | 10.44 | 34.22 | | 174 | 150 | 11.12 | 34.00 | | 26.00 | 202 | 0.44 |
| 235 | 9.80 | 34.33 | | 156 | 200 | 10.28 | 34.26 | | 26.35 | 169 | 0.53 |
| 280 | 9.63 | 34.36 | | 151 | 250 | 9.72 | 34.34 | | 26.50 | 154 | 0.61 |
| 377 | 8.16 | 34.38 | | 127 | 300 | 9.47 | 34.37 | | 26.57 | 148 | 0.69 |
| 472 | 7.24 | 34.38 | | 114 | 400 | 7.91 | 34.38 | | 26.82 | 124 | 0.83 |
| 574 | 6.20 | 34.42 | | 98 | 500 | 6.98 | 34.39 | | 26.96 | 110 | 0.96 |
| | | | | | 600 | (5.92) | (34.42) | | (27.13) | (95) | (1.07) |
| CREST; March 15, 1952; 0020 GCT; 27°49'N, 116°51'W; sounding, 2100 fm; wind, 300°, force 2; weather, cloudy; sea, rough; wire angle, 11°. | | | | | | | | | | | 117.60 |
| 0 | - | 33.46 | 5.67 | | 0 | 15.3 | 33.46 | 5.67 | 24.74 | 321 | 0.00 |
| 10 | 15.08 | 33.44 | 5.75 | 318 | 10 | 15.08 | 33.44 | 5.75 | 24.77 | 318 | 0.03 |
| 24 | - | 33.44 | 5.71 | | 20 | 15.1 | 33.44 | 5.74 | 24.77 | 319 | 0.06 |
| 49 | - | 33.44 | 5.78 | | 30 | 15.1 | 33.44 | 5.70 | 24.77 | 319 | 0.10 |
| 72 | - | 33.42 | 5.72 | | 50 | 14.9 | 33.44 | 5.77 | 24.81 | 315 | 0.16 |
| 97 | 13.95 | 33.46 | 5.47 | 294 | 75 | 14.1 | 33.42 | 5.71 | 24.97 | 300 | 0.24 |
| 146 | 10.04 | 33.71 | 3.46 | 205 | 100 | 13.50 | 33.47 | 5.41 | 25.13 | 284 | 0.31 |
| 238 | 9.65 | 34.31 | 1.36 | 155 | 150 | 10.04 | 33.75 | 3.20 | 25.99 | 202 | 0.43 |
| 284 | 8.53 | 34.20 | 1.40 | 146 | 200 | 9.88 | 34.20 | 1.61 | 26.37 | 167 | 0.53 |
| 381 | 7.67 | 34.31 | 0.59 | 125 | 250 | 9.33 | 34.29 | 1.36 | 26.53 | 151 | 0.61 |
| 473 | 6.57 | 34.34 | 0.39 | 109 | 300 | 8.36 | 34.21 | 1.35 | 26.62 | 143 | 0.69 |
| 569 | 6.04 | 34.34 | 0.36 | 102 | 400 | 7.41 | 34.33 | 0.49 | 26.85 | 120 | 0.82 |
| 761 | 4.96 | 34.40 | 0.41 | 85 | 500 | 6.39 | 34.34 | 0.39 | 27.00 | 106 | 0.94 |
| 950 | 4.18 | 34.49 | 0.56 | 70 | 600 | 5.88 | 34.34 | 0.36 | 27.07 | 100 | 1.05 |
| 1151 | 3.64 | 34.51 | 0.85 | 64 | 700 | 5.30 | 34.37 | 0.39 | 27.16 | 91 | 1.16 |
| | | | | | 800 | 4.79 | 34.42 | 0.44 | 27.26 | 82 | 1.25 |
| | | | | | 1000 | 4.02 | 34.50 | 0.62 | 27.41 | 68 | 1.42 |
| BLACK DOUGLAS; April 1, 1952; 1017 GCT; 27°47.5'N, 116°54'W; sounding, 1780 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | | | 117.60 |
| 0 | - | 33.53 | | | 0 | 16.1 | 33.53 | | 24.62 | 333 | 0.00 |
| 10 | 16.09 | 33.53 | | 333 | 10 | 16.09 | 33.53 | | 24.62 | 333 | 0.03 |
| 24 | - | 33.58 | | | 20 | 15.3 | 33.57 | | 24.82 | 313 | 0.07 |
| 49 | - | 33.57 | | | 30 | 15.0 | 33.58 | | 24.90 | 306 | 0.10 |
| 72 | - | 33.58 | | | 50 | 15.0 | 33.57 | | 24.89 | 307 | 0.16 |
| 96 | 12.00 | 33.53 | | 252 | 75 | 13.3 | 33.57 | | 25.25 | 273 | 0.23 |
| 145 | 9.97 | 33.84 | | 195 | 100 | 11.70 | 33.53 | | 25.52 | 247 | 0.30 |
| 190 | 9.44 | 34.09 | | 168 | 150 | 9.88 | 33.87 | | 26.11 | 191 | 0.41 |
| 236 | 9.19 | 34.27 | | 151 | 200 | 9.38 | 34.21 | | 26.46 | 158 | 0.50 |
| 281 | 8.43 | 34.22 | | 143 | 250 | 9.03 | 34.26 | | 26.55 | 149 | 0.58 |
| 379 | 7.60 | 34.34 | | 122 | 300 | 8.24 | 34.23 | | 26.65 | 139 | 0.65 |
| 474 | 6.58 | 34.33 | | 110 | 400 | 7.36 | 34.34 | | 26.87 | 119 | 0.79 |
| 578 | 5.84 | 34.34 | | 100 | 500 | 6.38 | 34.33 | | 27.00 | 107 | 0.91 |
| | | | | | 600 | (5.73) | (34.34) | | (27.09) | (98) | (1.02) |

| | OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 117.70 | BLACK DOUGLAS; April 1, 1952; 1619 GCT; 27°27.5'N, 117°32.5'W; sounding, 2160 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 11°. | | | | | | | | | | | |
| | 0 | - | 33.60 | | | 0 | 16.0 | 33.60 | | 24.69 | 326 | 0.00 |
| | 10 | 16.08 | 33.53 | | 333 | 10 | 16.08 | 33.53 | | 24.62 | 333 | 0.03 |
| | 24 | - | 33.55 | | | 20 | 16.0 | 33.55 | | 24.65 | 330 | 0.07 |
| | 48 | - | 33.55 | | | 30 | 15.4 | 33.55 | | 24.79 | 317 | 0.10 |
| | 72 | - | 33.57 | | | 50 | 15.3 | 33.55 | | 24.81 | 315 | 0.16 |
| | 95 | 14.88 | 33.55 | | 306 | 75 | 15.3 | 33.57 | | 24.82 | 313 | 0.24 |
| | 143 | 11.21 | 33.51 | | 240 | 100 | 14.70 | 33.54 | | 24.93 | 303 | 0.32 |
| | 187 | 9.35 | 33.84 | | 185 | 150 | 10.80 | 33.52 | | 25.68 | 232 | 0.45 |
| | 232 | 9.68 | 34.04 | | 175 | 200 | 9.38 | 33.90 | | 26.22 | 181 | 0.56 |
| | 277 | 9.08 | 34.25 | | 150 | 250 | 9.49 | 34.13 | | 26.38 | 166 | 0.65 |
| | 374 | 7.88 | 34.34 | | 126 | 300 | 8.78 | 34.28 | | 26.61 | 144 | 0.73 |
| | 467 | 6.91 | 34.38 | | 110 | 400 | 7.58 | 34.36 | | 26.85 | 121 | 0.87 |
| | 570 | 6.07 | 34.34 | | 103 | 500 | 6.64 | 34.37 | | 26.99 | 107 | 0.99 |
| 120.25 | CREST; March 14, 1952; 0114 GCT; 28°21'N, 114°15'W; sounding, 30 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | |
| | 0 | 15.20 | 33.69 | 5.80 | 302 | 0 | 15.20 | 33.69 | 5.80 | 24.94 | 302 | 0.00 |
| | 10 | 15.20 | 33.69 | 5.80 | 302 | 10 | 15.20 | 33.69 | 5.80 | 24.94 | 302 | 0.03 |
| | 20 | 15.12 | 33.73 | 5.75 | 298 | 20 | 15.12 | 33.73 | 5.75 | 24.99 | 298 | 0.06 |
| | 30 | 15.08 | 33.71 | 5.69 | 299 | 30 | 15.08 | 33.71 | 5.69 | 24.98 | 299 | 0.09 |
| 120.25 | BLACK DOUGLAS; March 31, 1952; 1002 GCT; 28°23'N, 114°14.5'W; sounding, 42 fm; wind, 320°, force 1; weather, cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | | |
| | 0 | 14.96 | 33.55 | | 308 | 0 | 14.96 | 33.55 | | 24.88 | 308 | 0.00 |
| | 10 | 14.94 | 33.58 | | 305 | 10 | 14.94 | 33.58 | | 24.91 | 305 | 0.03 |
| | 20 | 14.16 | 33.57 | | 290 | 20 | 14.16 | 33.57 | | 25.07 | 290 | 0.06 |
| | 30 | 13.70 | 33.60 | | 279 | 30 | 13.70 | 33.60 | | 25.19 | 279 | 0.09 |
| | 50 | 12.05 | 33.62 | | 246 | 50 | 12.05 | 33.62 | | 25.53 | 246 | 0.14 |
| 120.30 | CREST; March 13, 1952; 2241 GCT; 28°13'N, 114°34'W; sounding, 50 fm; wind, 290°, force 5; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | | |
| | 0 | 14.88 | 33.68 | 5.58 | 297 | 0 | 14.88 | 33.68 | 5.58 | 25.00 | 297 | 0.00 |
| | 10 | 14.82 | 33.68 | 5.50 | 295 | 10 | 14.82 | 33.68 | 5.50 | 25.01 | 295 | 0.03 |
| | 20 | 14.78 | 33.66 | 5.71 | 296 | 20 | 14.78 | 33.66 | 5.71 | 25.01 | 296 | 0.06 |
| | 30 | 14.70 | 33.68 | 5.71 | 293 | 30 | 14.70 | 33.68 | 5.71 | 25.04 | 293 | 0.09 |
| | 50 | 14.12 | 33.62 | 5.17 | 286 | 50 | 14.12 | 33.62 | 5.17 | 25.12 | 286 | 0.15 |
| 120.30 | BLACK DOUGLAS; March 31, 1952; 0727 GCT; 28°13'N, 114°34'W; sounding, 50 fm; wind, 330°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | |
| | 0 | 14.44 | 33.46 | | 304 | 0 | 14.44 | 33.46 | | 24.93 | 304 | 0.00 |
| | 10 | 14.74 | 33.55 | | 303 | 10 | 14.74 | 33.55 | | 24.93 | 303 | 0.03 |
| | 20 | 14.23 | 33.57 | | 291 | 20 | 14.23 | 33.57 | | 25.05 | 291 | 0.06 |
| | 30 | 14.26 | 33.64 | | 287 | 30 | 14.26 | 33.64 | | 25.10 | 287 | 0.09 |
| | 50 | 12.50 | 33.48 | | 265 | 50 | 12.50 | 33.48 | | 25.33 | 265 | 0.14 |
| 120.35 | CREST; March 13, 1952; 2003 GCT; 28°03'N, 114°54'W; sounding, 47 fm; wind, 310°, force 5; weather, overcast; sea, moderate; wire angle, 05°. | | | | | | | | | | | |
| | 0 | 15.38 | 33.75 | 5.61 | 302 | 0 | 15.38 | 33.75 | 5.61 | 24.95 | 302 | 0.00 |
| | 10 | 15.24 | 33.75 | 5.67 | 299 | 10 | 15.24 | 33.75 | 5.67 | 24.98 | 299 | 0.03 |
| | 20 | 15.21 | 33.75 | 5.66 | 298 | 20 | 15.21 | 33.75 | 5.66 | 24.98 | 298 | 0.06 |
| | 30 | 15.19 | 33.69 | 5.65 | 302 | 30 | 15.19 | 33.69 | 5.65 | 24.94 | 302 | 0.09 |
| | 50 | 15.19 | 33.75 | 5.62 | 298 | 50 | 15.19 | 33.75 | 5.62 | 24.99 | 298 | 0.15 |
| 120.35 | BLACK DOUGLAS; March 31, 1952; 0439 GCT; 28°03'N, 114°54'W; sounding, 46 fm; wind, 320°, force 2; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | | |
| | 0 | 15.12 | 33.60 | | 307 | 0 | 15.12 | 33.60 | | 24.89 | 307 | 0.00 |
| | 10 | 15.06 | 33.60 | | 306 | 10 | 15.06 | 33.60 | | 24.90 | 306 | 0.03 |
| | 20 | 14.46 | 33.58 | | 295 | 20 | 14.46 | 33.58 | | 25.01 | 295 | 0.06 |
| | 30 | 14.10 | 33.53 | | 292 | 30 | 14.10 | 33.53 | | 25.05 | 292 | 0.09 |
| | 50 | 13.94 | 33.55 | | 287 | 50 | 13.94 | 33.55 | | 25.10 | 287 | 0.15 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; March 13, 1952; 1238 GCT; 27°40'N, 115°28.5'W; sounding, 950 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 28°. | | | | | | | | | | | 120.45 |
| 0 | - | 33.49 | 5.73 | | 0 | 14.9 | 33.49 | 5.73 | 24.85 | 311 | 0.00 |
| 8 | 14.78 | 33.53 | 5.74 | 305 | 10 | 14.8 | 33.54 | 5.73 | 24.91 | 305 | 0.03 |
| 45 | - | 33.73 | 5.05 | | 20 | 14.8 | 33.59 | 5.69 | 24.95 | 302 | 0.06 |
| 62 | - | 33.75 | 5.27 | | 30 | 14.8 | 33.66 | 5.46 | 25.00 | 296 | 0.09 |
| 70a) | 12.28 | 33.42 | 4.87 | 265 | 50 | 14.6 | 33.75 | 5.09 | 25.12 | 286 | 0.15 |
| 94 | 11.29 | 33.55 | 3.95 | 238 | 75 | 11.90 | 33.42 | 4.65 | 25.40 | 258 | 0.22 |
| 169 | 11.44 | 34.49 | 0.68 | 171 | 100 | 11.30 | 33.69 | 3.27 | 25.72 | 228 | 0.28 |
| 203 | 10.83 | 34.52 | 0.59 | 159 | 150 | 11.43 | 34.40 | 0.92 | 26.25 | 178 | 0.38 |
| 279 | 9.37 | 34.49 | 0.45 | 137 | 200 | 10.91 | 34.52 | 0.60 | 26.44 | 160 | 0.47 |
| 351 | 8.53 | 34.43 | 0.39 | 129 | 250 | 9.84 | 34.51 | 0.51 | 26.62 | 143 | 0.55 |
| 424 | 7.76 | 34.40 | 0.34 | 120 | 300 | 9.09 | 34.47 | 0.44 | 26.71 | 134 | 0.62 |
| 565 | 6.44 | 34.40 | 0.30 | 103 | 400 | 8.01 | 34.41 | 0.36 | 26.83 | 123 | 0.75 |
| 717 | 5.36 | 34.40 | 0.30 | 90 | 500 | 7.03 | 34.40 | 0.32 | 26.96 | 110 | 0.88 |
| | | | | | 600 | 6.16 | 34.40 | 0.30 | 27.08 | 99 | 0.99 |
| | | | | | 700 | 5.46 | 34.40 | 0.30 | 27.17 | 91 | 1.09 |
| BLACK DOUGLAS; March 30, 1952; 2320 GCT; 27°43'N, 115°33'W; sounding, 1350 fm; wind, 320°, force 1; weather, cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | | 120.45 |
| 0 | - | 33.62 | | | 0 | 15.6 | 33.62 | | 24.80 | 316 | 0.00 |
| 10 | 14.94 | 33.66 | | 299 | 10 | 14.94 | 33.66 | | 24.97 | 299 | 0.03 |
| 25 | - | 33.69 | | | 20 | 14.3 | 33.68 | | 25.12 | 285 | 0.06 |
| 50 | - | 33.87 | | | 30 | 13.5 | 33.70 | | 25.31 | 268 | 0.09 |
| 75 | - | 33.87 | | | 50 | 12.0 | 33.87 | | 25.73 | 227 | 0.14 |
| 98 | 10.54 | 34.22 | | 176 | 75 | 10.2 | 33.87 | | 26.06 | 196 | 0.19 |
| 150 | 9.50 | 34.29 | | 154 | 100 | 10.40 | 34.22 | | 26.29 | 174 | 0.24 |
| 196 | 9.40 | 34.47 | | 139 | 150 | 9.50 | 34.29 | | 26.50 | 154 | 0.32 |
| 290 | 8.99 | 34.47 | | 133 | 200 | 9.39 | 34.47 | | 26.66 | 139 | 0.40 |
| 387 | 7.77 | 34.40 | | 120 | 250 | 9.23 | 34.48 | | 26.69 | 136 | 0.47 |
| 480 | 6.79 | 34.40 | | 107 | 300 | 8.89 | 34.46 | | 26.73 | 132 | 0.54 |
| 580 | 5.90 | 34.40 | | 96 | 400 | 7.60 | 34.40 | | 26.88 | 118 | 0.67 |
| 772 | 4.88 | 34.43 | | 82 | 500 | 6.61 | 34.40 | | 27.02 | 105 | 0.79 |
| 963 | 4.07 | 34.50 | | 68 | 600 | 5.77 | 34.40 | | 27.13 | 94 | 0.89 |
| 1164 | 3.57 | 34.54 | | 61 | 700 | 5.21 | 34.41 | | 27.20 | 87 | 0.99 |
| | | | | | 800 | 4.77 | 34.44 | | 27.28 | 80 | 1.08 |
| | | | | | 1000 | 3.94 | 34.51 | | 27.42 | 66 | 1.25 |
| CREST; March 13, 1952; 0828 GCT; 27°30.5'N, 115°50.5'W; sounding, 2300 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 23°. | | | | | | | | | | | 120.50 |
| 0 | - | 33.89 | 5.49 | | 0 | 16.6 | 33.89 | 5.49 | 24.78 | 318 | 0.00 |
| 9 | 16.59 | 33.86 | 5.44 | 320 | 10 | 16.6 | 33.86 | 5.44 | 24.75 | 320 | 0.03 |
| 23 | - | 33.89 | 5.48 | | 20 | 16.6 | 33.89 | 5.47 | 24.78 | 318 | 0.06 |
| 51 | - | 33.89 | 5.45 | | 30 | 16.6 | 33.89 | 5.48 | 24.78 | 318 | 0.10 |
| 73 | - | 33.89 | 5.44 | | 50 | 16.6 | 33.89 | 5.46 | 24.78 | 318 | 0.16 |
| 99 | 12.70 | 33.73 | 3.79 | 250 | 75 | 14.5 | 33.89 | 5.44 | 25.24 | 273 | 0.23 |
| 144 | 10.80 | 33.98 | 2.38 | 198 | 100 | 12.60 | 33.73 | 3.73 | 25.51 | 248 | 0.30 |
| 228 | 9.88 | 34.36 | 1.21 | 155 | 150 | 10.71 | 34.01 | 2.30 | 26.08 | 194 | 0.41 |
| 265 | 9.57 | 34.42 | 0.84 | 145 | 200 | 10.08 | 34.20 | 1.56 | 26.33 | 170 | 0.50 |
| 348 | 8.52 | 34.40 | 0.70 | 131 | 250 | 9.72 | 34.41 | 0.97 | 26.56 | 149 | 0.59 |
| 426 | 7.84 | 34.38 | 0.43 | 123 | 300 | 9.11 | 34.42 | 0.77 | 26.67 | 138 | 0.66 |
| 508 | 6.96 | 34.38 | 0.30 | 111 | 400 | 8.09 | 34.38 | 0.53 | 26.79 | 126 | 0.80 |
| 662 | 5.50 | 34.45 | 0.27 | 88 | 500 | 7.06 | 34.38 | 0.31 | 26.94 | 112 | 0.93 |
| 822 | 4.65 | 34.47 | 0.42 | 77 | 600 | 6.02 | 34.41 | 0.27 | 27.11 | 97 | 1.04 |
| 993 | 4.04 | 34.47 | 0.58 | 70 | 700 | 5.25 | 34.46 | 0.28 | 27.24 | 84 | 1.14 |
| | | | | | 800 | 4.74 | 34.47 | 0.40 | 27.31 | 78 | 1.23 |
| | | | | | 1000 | (4.02) | (34.47) | (0.59) | (27.38) | (70) | (1.39) |

a) Possible pretrip beginning at 70 meters.

S10

CCOFI 5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 120.50 | BLACK DOUGLAS; March 30, 1952; 1948 GCT; 27°33'N, 115°52.5'W; sounding, 2060 fm; wind, 020°, force 1; weather, cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | - | 33.42 | | | 0 | 15.7 | 33.42 | | 24.62 | 333 | 0.00 |
| 10 | 14.64 | 33.37 | | 314 | 10 | 14.64 | 33.37 | | 24.81 | 314 | 0.03 |
| 24 | - | 33.37 | | | 20 | 14.4 | 33.37 | | 24.87 | 310 | 0.06 |
| 48 | - | 33.33 | | | 30 | 13.9 | 33.37 | | 24.97 | 300 | 0.09 |
| 72 | - | 33.39 | | | 50 | 13.1 | 33.33 | | 25.10 | 287 | 0.15 |
| 96 | 11.93 | 33.40 | | 260 | 75 | 12.5 | 33.39 | | 25.26 | 271 | 0.22 |
| 145 | 10.04 | 33.86 | | 194 | 100 | 11.50 | 33.40 | | 25.46 | 253 | 0.29 |
| 189 | 9.47 | 34.09 | | 168 | 150 | 9.99 | 33.90 | | 26.12 | 191 | 0.40 |
| 232 | 9.12 | 34.25 | | 151 | 200 | 9.37 | 34.13 | | 26.40 | 164 | 0.49 |
| 277 | 8.99 | 34.40 | | 138 | 250 | 9.06 | 34.32 | | 26.60 | 145 | 0.57 |
| 373 | 7.92 | 34.40 | | 122 | 300 | 8.86 | 34.41 | | 26.70 | 135 | 0.64 |
| 466 | 6.81 | 34.36 | | 110 | 400 | 7.57 | 34.39 | | 26.88 | 118 | 0.78 |
| 568 | 6.10 | 34.40 | | 98 | 500 | 6.53 | 34.37 | | 27.01 | 106 | 0.90 |
| 120.60 | CREST; March 13, 1952; 0258 GCT; 27°13'N, 116°31.5'W; sounding, 2100 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 20°. | | | | | | | | | | |
| 0 | - | 33.78 | 5.55 | | 0 | 16.2 | 33.78 | 5.55 | 24.78 | 317 | 0.00 |
| 9 | 16.21 | 33.78 | 5.57 | 317 | 10 | 16.2 | 33.78 | 5.57 | 24.78 | 317 | 0.03 |
| 23 | - | 33.78 | 5.54 | | 20 | 16.2 | 33.78 | 5.56 | 24.78 | 317 | 0.06 |
| 52 | - | 33.77 | 5.54 | | 30 | 16.2 | 33.78 | 5.54 | 24.78 | 317 | 0.10 |
| 75 | - | 33.58 | 5.65 | | 50 | 16.1 | 33.77 | 5.54 | 24.80 | 316 | 0.16 |
| 102 | 13.34 | 33.58 | 4.42 | 273 | 75 | 15.2 | 33.58 | 5.65 | 24.85 | 311 | 0.24 |
| 147 | 11.07 | 33.97 | 2.42 | 203 | 100 | 13.5 | 33.57 | 4.53 | 25.21 | 277 | 0.31 |
| 244 | 10.02 | 34.51 | 0.69 | 146 | 150 | 11.04 | 34.01 | 2.32 | 26.02 | 200 | 0.43 |
| 286 | 9.53 | 34.47 | 0.52 | 141 | 200 | 10.46 | 34.41 | 1.22 | 26.43 | 161 | 0.52 |
| 384 | 8.33 | 34.47 | 0.33 | 123 | 250 | 9.97 | 34.51 | 0.66 | 26.59 | 145 | 0.60 |
| 479 | 7.31 | 34.47 | 0.25 | 109 | 300 | 9.36 | 34.47 | 0.48 | 26.67 | 138 | 0.68 |
| 573 | 6.42 | 34.45 | 0.20 | 99 | 400 | 8.16 | 34.47 | 0.33 | 26.85 | 120 | 0.81 |
| 759 | 5.09 | 34.47 | 0.32 | 81 | 500 | 7.12 | 34.47 | 0.24 | 27.01 | 106 | 0.93 |
| 955 | 4.33 | 34.47 | 0.49 | 73 | 600 | 6.19 | 34.45 | 0.20 | 27.12 | 96 | 1.04 |
| 1150 | 3.61 | 34.49 | 0.71 | 65 | 700 | 5.43 | 34.47 | 0.27 | 27.23 | 85 | 1.14 |
| | | | | | 800 | 4.93 | 34.47 | 0.36 | 27.29 | 80 | 1.23 |
| | | | | | 1000 | 4.16 | 34.47 | 0.54 | 27.37 | 72 | 1.40 |
| 120.60 | BLACK DOUGLAS; March 30, 1952; 1325 GCT; 27°13'N, 116°31.5'W; sounding, 2100 fm; wind, calm; weather, overcast; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | - | 33.73 | | | 0 | 16.5 | 33.73 | | 24.68 | 327 | 0.00 |
| 10 | 16.45 | 33.77 | | 323 | 10 | 16.45 | 33.77 | | 24.72 | 323 | 0.03 |
| 25 | - | 33.71 | | | 20 | 16.0 | 33.72 | | 24.78 | 317 | 0.06 |
| 50 | - | 33.78 | | | 30 | 15.7 | 33.71 | | 24.84 | 312 | 0.10 |
| 74 | - | 33.87 | | | 50 | 16.0 | 33.78 | | 24.83 | 313 | 0.16 |
| 98 | 15.34 | 33.68 | | 306 | 75 | 16.0 | 33.87 | | 24.90 | 306 | 0.24 |
| 149 | 10.73 | 33.82 | | 209 | 100 | 14.80 | 33.68 | | 25.02 | 295 | 0.31 |
| 196 | 10.51 | 34.25 | | 173 | 150 | 10.73 | 33.84 | | 25.94 | 207 | 0.44 |
| 285 | 9.60 | 34.50 | | 140 | 200 | 10.48 | 34.29 | | 26.33 | 170 | 0.54 |
| 382 | 8.56 | 34.47 | | 126 | 250 | 9.97 | 34.48 | | 26.57 | 147 | 0.62 |
| 474 | 7.39 | 34.42 | | 113 | 300 | 9.43 | 34.50 | | 26.68 | 137 | 0.69 |
| 570 | 5.78 | 34.40 | | 95 | 400 | 8.38 | 34.46 | | 26.81 | 124 | 0.83 |
| 760 | 5.10 | 34.49 | | 80 | 500 | 6.88 | 34.41 | | 26.99 | 107 | 0.95 |
| 949 | 4.18 | 34.50 | | 70 | 600 | 5.61 | 34.41 | | 27.16 | 92 | 1.06 |
| 1150 | 3.58 | 34.52 | | 62 | 700 | 5.30 | 34.46 | | 27.23 | 85 | 1.16 |
| | | | | | 800 | 4.89 | 34.50 | | 27.31 | 77 | 1.24 |
| | | | | | 1000 | 3.98 | 34.50 | | 27.41 | 68 | 1.41 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; March 12, 1952; 2129 GCT; 26°52'N, 117°10'W; sounding, 2050 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 20°. 120.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.82 | 5.55 | | 0 | 16.6 | 33.82 | 5.55 | 24.72 | 323 | 0.00 |
| 9 | 16.48 | 33.82 | 5.46 | 320 | 10 | 16.5 | 33.82 | 5.46 | 24.75 | 321 | 0.03 |
| 23 | - | 33.82 | 5.46 | | 20 | 16.4 | 33.82 | 5.46 | 24.77 | 319 | 0.06 |
| 52 | - | 33.82 | 5.48 | | 30 | 16.4 | 33.82 | 5.47 | 24.77 | 319 | 0.10 |
| 75 | - | 33.66 | 5.17 | | 50 | 16.3 | 33.82 | 5.48 | 24.79 | 316 | 0.16 |
| 102 | 12.25 | 33.68 | 3.69 | 246 | 75 | 15.3 | 33.66 | 5.17 | 24.89 | 307 | 0.24 |
| 152 | 10.90 | 34.02 | 2.20 | 197 | 100 | 12.6 | 33.67 | 3.76 | 25.46 | 253 | 0.31 |
| 253 | 9.99 | 34.43 | 0.75 | 151 | 150 | 10.93 | 34.01 | 2.24 | 26.04 | 198 | 0.42 |
| 298 | 9.37 | 34.42 | 0.69 | 142 | 200 | 10.46 | 34.29 | 1.25 | 26.34 | 169 | 0.52 |
| 403 | 8.05 | 34.40 | 0.42 | 124 | 250 | 10.02 | 34.43 | 0.76 | 26.52 | 152 | 0.60 |
| 502 | 6.83 | 34.42 | 0.33 | 106 | 300 | 9.36 | 34.42 | 0.68 | 26.63 | 142 | 0.68 |
| 602 | 6.14 | 34.40 | 0.24 | 99 | 400 | 8.09 | 34.40 | 0.43 | 26.81 | 125 | 0.82 |
| 758p | 5.29 | 34.42 | 0.32 | 87 | 500 | 6.86 | 34.42 | 0.34 | 27.00 | 106 | 0.94 |
| 999 | 3.95 | 34.49 | 0.62 | 68 | 600 | 6.16 | 34.40 | 0.25 | 27.08 | 99 | 1.05 |
| 1200 | 3.45 | 34.51 | 0.86 | 62 | | | | | | | |

BLACK DOUGLAS; March 30, 1952; 0731 GCT; 26°52.5'N, 117°10'W; sounding, 2200 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°. 120.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.49 | | | 0 | 16.4 | 33.49 | | 24.52 | 343 | 0.00 |
| 10 | 15.84 | 33.49 | | 331 | 10 | 15.84 | 33.49 | | 24.64 | 331 | 0.03 |
| 25 | - | 33.49 | | | 20 | 15.3 | 33.49 | | 24.76 | 319 | 0.07 |
| 50 | - | 33.49 | | | 30 | 15.3 | 33.49 | | 24.76 | 319 | 0.10 |
| 75 | - | 33.48 | | | 50 | 15.3 | 33.49 | | 24.76 | 319 | 0.16 |
| 99 | 15.04 | 33.46 | | 316 | 75 | 15.1 | 33.48 | | 24.80 | 316 | 0.24 |
| 150 | 10.44 | 33.60 | | 220 | 100 | 15.04 | 33.46 | | 24.80 | 316 | 0.32 |
| 196 | 9.98 | 34.05 | | 179 | 150 | 10.44 | 33.60 | | 25.81 | 220 | 0.46 |
| 242 | 9.65 | 34.34 | | 153 | 200 | 9.94 | 34.10 | | 26.28 | 175 | 0.56 |
| 289 | 9.36 | 34.43 | | 141 | 250 | 9.59 | 34.37 | | 26.55 | 149 | 0.64 |
| 389 | 8.08 | 34.42 | | 123 | 300 | 9.29 | 34.43 | | 26.65 | 140 | 0.72 |
| 485 | 7.02 | 34.45 | | 106 | 400 | 7.93 | 34.42 | | 26.85 | 121 | 0.85 |
| 588 | 6.31 | 34.45 | | 97 | 500 | 6.91 | 34.45 | | 27.02 | 105 | 0.97 |
| | | | | | 600 | (6.23) | (34.45) | | (27.11) | (96) | (1.08) |

CREST; March 12, 1952; 1600 GCT; 26°30'N, 117°48'W; sounding, 2000 fm; wind, 010°, force 4; weather, partly cloudy; sea, rough; wire angle, 25°. 120.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.62 | 5.63 | | 0 | 15.7 | 33.62 | 5.63 | 24.77 | 318 | 0.00 |
| 8 | 15.68 | 33.62 | 5.58 | 318 | 10 | 15.7 | 33.62 | 5.58 | 24.77 | 318 | 0.03 |
| 22 | - | 33.62 | 5.59 | | 20 | 15.7 | 33.62 | 5.59 | 24.77 | 318 | 0.06 |
| 45 | - | 33.62 | 5.60 | | 30 | 15.6 | 33.62 | 5.60 | 24.80 | 316 | 0.10 |
| 67 | - | 33.62 | 5.59 | | 50 | 15.6 | 33.62 | 5.60 | 24.80 | 316 | 0.16 |
| 88 | 13.66 | 33.44 | 4.99 | 290 | 75 | 15.2 | 33.61 | 5.51 | 24.88 | 308 | 0.24 |
| 131 | 11.22 | 33.80 | 2.95 | 218 | 100 | 12.20 | 33.47 | 4.21 | 25.38 | 260 | 0.31 |
| 213 | 9.71 | 34.22 | 1.57 | 162 | 150 | 10.69 | 33.93 | 2.57 | 26.02 | 200 | 0.43 |
| 255 | 9.32 | 34.34 | 1.08 | 147 | 200 | 9.87 | 34.14 | 1.79 | 26.32 | 171 | 0.52 |
| 340 | 8.56 | 34.34 | 0.75 | 136 | 250 | 9.39 | 34.34 | 1.12 | 26.56 | 149 | 0.60 |
| 422 | 7.67 | 34.40 | 0.48 | 119 | 300 | 8.94 | 34.34 | 0.89 | 26.63 | 142 | 0.68 |
| 509 | 6.84 | 34.34 | 0.31 | 112 | 400 | 7.90 | 34.39 | 0.54 | 26.83 | 123 | 0.82 |
| 684 | 5.61 | 34.42 | 0.26 | 91 | 500 | 6.94 | 34.34 | 0.33 | 26.93 | 113 | 0.94 |
| 866 | 4.74 | 34.47 | 0.41 | 78 | 600 | 6.14 | 34.38 | 0.27 | 27.07 | 100 | 1.06 |
| 1058 | 4.02 | 34.52 | 0.59 | 66 | 700 | 5.51 | 34.43 | 0.27 | 27.18 | 89 | 1.16 |
| | | | | | 800 | 5.01 | 34.45 | 0.33 | 27.26 | 82 | 1.25 |
| | | | | | 1000 | 4.24 | 34.50 | 0.53 | 27.39 | 70 | 1.42 |

S10

CCOFI 5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 120.80 BLACK DOUGLAS; March 30, 1952; 0158 GCT; 26°32.5'N, 117°48.5'W; sounding, 2140 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | | |
| 0 | - | 33.55 | | | 0 | 16.8 | 33.55 | | 24.47 | 347 | 0.00 |
| 10 | 15.93 | 33.58 | | 326 | 10 | 15.93 | 33.58 | | 24.69 | 326 | 0.03 |
| 25 | - | 33.55 | | | 20 | 15.4 | 33.56 | | 24.80 | 316 | 0.07 |
| 50 | - | 33.55 | | | 30 | 15.3 | 33.55 | | 24.81 | 315 | 0.10 |
| 74 | - | 33.57 | | | 50 | 15.3 | 33.55 | | 24.81 | 315 | 0.16 |
| 98 | 15.15 | 33.62 | | 307 | 75 | 15.2 | 33.57 | | 24.85 | 311 | 0.24 |
| 197 | 10.14 | 34.11 | | 177 | 100 | 14.50 | 33.63 | | 25.04 | 292 | 0.32 |
| 243 | 9.28 | 34.23 | | 155 | 150 | 11.22 | 33.91 | | 25.91 | 210 | 0.44 |
| 290 | 8.69 | 34.29 | | 142 | 200 | 10.10 | 34.12 | | 26.27 | 176 | 0.54 |
| 387 | 7.72 | 34.34 | | 124 | 250 | 9.20 | 34.24 | | 26.51 | 153 | 0.63 |
| 480 | 6.68 | 34.36 | | 109 | 300 | 8.58 | 34.30 | | 26.66 | 139 | 0.70 |
| 578 | 5.99 | 34.34 | | 102 | 400 | 7.60 | 34.34 | | 26.84 | 122 | 0.84 |
| 769 | 4.94 | 34.45 | | 81 | 500 | 6.50 | 34.36 | | 27.00 | 106 | 0.96 |
| 959 | 4.22 | 34.42 | | 76 | 600 | 5.87 | 34.34 | | 27.07 | 100 | 1.07 |
| 1160 | 3.66 | 34.52 | | 63 | 700 | 5.32 | 34.41 | | 27.19 | 88 | 1.17 |
| | | | | | 800 | 4.80 | 34.45 | | 27.28 | 80 | 1.26 |
| | | | | | 1000 | 4.10 | 34.43 | | 27.34 | 74 | 1.44 |
| 120.90 CREST; March 12, 1952; 0918 GCT;[a] 26°13'N, 118°27.5'W; sounding, 2300 fm; wind, 010°, force 4; weather, partly cloudy; sea, very rough; wire angle, 08°. | | | | | | | | | | | |
| 869 | 4.46 | 34.47 | | 75 | | | | | | | |
| 872 | 4.44 | 34.45 | | 76 | | | | | | | |
| 875 | 4.44 | 34.47 | | 74 | | | | | | | |
| 878 | 4.43 | 34.47 | | 74 | | | | | | | |
| 881 | - | 34.48 | | | | | | | | | |
| 884 | 4.40 | 34.49 | | 73 | | | | | | | |
| 887 | - | 34.47 | | | | | | | | | |
| 890 | - | 34.51 | | | | | | | | | |
| 893 | - | 34.48 | | | | | | | | | |
| 896 | 4.40 | 34.47 | | 74 | | | | | | | |
| 898 | 4.33 | 34.47 | | 73 | | | | | | | |
| 901 | 4.38 | 34.47 | | 74 | | | | | | | |
| 904 | 4.37 | 34.47 | | 74 | | | | | | | |
| 907 | 4.38 | 34.49 | | 72 | | | | | | | |
| 910 | 4.35 | 34.47 | | 74 | | | | | | | |
| 120.90 CREST; March 12, 1952; 1037 GCT; 26°13'N, 118°27.5'W; sounding, 2300 fm; wind, 010°, force 4; weather, partly cloudy; sea, very rough; wire angle, 06°. | | | | | | | | | | | |
| 0 | - | 33.80 | 5.51 | | 0 | 16.7 | 33.80 | 5.51 | 24.68 | 327 | 0.00 |
| 10 | 16.44 | 33.78 | 5.48 | 322 | 10 | 16.44 | 33.78 | 5.48 | 24.73 | 322 | 0.03 |
| 25 | - | 33.77 | 5.47 | | 20 | 16.5 | 33.77 | 5.47 | 24.71 | 324 | 0.06 |
| 50 | - | 33.87 | 5.46 | | 30 | 16.5 | 33.77 | 5.47 | 24.71 | 324 | 0.10 |
| 75 | - | 33.87 | 5.65 | | 50 | 16.8 | 33.87 | 5.46 | 24.71 | 324 | 0.16 |
| 99 | 13.55 | 33.58 | 4.98 | 277 | 75 | 16.7 | 33.87 | 5.65 | 24.74 | 322 | 0.24 |
| 151 | 10.46 | 33.80 | 3.12 | 206 | 100 | 13.60 | 33.58 | 4.94 | 25.19 | 278 | 0.32 |
| 246 | 9.42 | 34.29 | 1.33 | 153 | 150 | 10.49 | 33.78 | 3.17 | 25.94 | 208 | 0.44 |
| 292 | 8.80 | 34.30 | 1.07 | 142 | 200 | 9.87 | 34.21 | 1.86 | 26.38 | 166 | 0.54 |
| 391 | 7.21 | 34.31 | 0.60 | 119 | 250 | 9.39 | 34.29 | 1.31 | 26.52 | 152 | 0.62 |
| 488 | 6.39 | 34.34 | 0.42 | 106 | 300 | 8.66 | 34.30 | 1.03 | 26.64 | 140 | 0.69 |
| 587 | 5.81 | 34.37 | 0.30 | 97 | 400 | 7.12 | 34.31 | 0.58 | 26.88 | 118 | 0.83 |
| 779 | 4.77 | 34.43 | 0.39 | 81 | 500 | 6.31 | 34.35 | 0.40 | 27.02 | 105 | 0.95 |
| 972 | 4.11 | 34.51 | 0.57 | 68 | 600 | 5.74 | 34.37 | 0.30 | 27.11 | 96 | 1.06 |
| 1170 | 3.60 | 34.54 | 0.76 | 61 | 700 | 5.17 | 34.40 | 0.34 | 27.20 | 88 | 1.16 |
| | | | | | 800 | 4.69 | 34.44 | 0.41 | 27.29 | 79 | 1.25 |
| | | | | | 1000 | 4.03 | 34.52 | 0.60 | 27.42 | 67 | 1.41 |

a) Test cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| BLACK DOUGLAS; March 29, 1952; 1845 GCT; 26°13'N, 118°27.5'W; sounding, 2280 fm; wind, 300°, force 1; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 120.90 |
| 0 | - | 33.96 | | | 0 | 17.7 | 33.96 | | 24.57 | 338 | 0.00 |
| 10 | 17.42 | 33.95 | | 332 | 10 | 17.42 | 33.95 | | 24.63 | 332 | 0.03 |
| 25 | - | 33.96 | | | 20 | 17.3 | 33.96 | | 24.67 | 329 | 0.07 |
| 50 | - | 33.78 | | | 30 | 17.0 | 33.96 | | 24.74 | 322 | 0.10 |
| 74 | - | 33.86 | | | 50 | 16.4 | 33.78 | | 24.74 | 322 | 0.16 |
| 98 | 15.70 | 33.80 | | 305 | 75 | 16.3 | 33.86 | | 24.82 | 314 | 0.24 |
| 149 | 11.14 | 33.91 | | 209 | 100 | 15.50 | 33.80 | | 24.96 | 301 | 0.32 |
| 195 | 9.98 | 34.02 | | 182 | 150 | 11.11 | 33.91 | | 25.93 | 208 | 0.45 |
| 242 | 9.25 | 34.22 | | 155 | 200 | 9.89 | 34.04 | | 26.24 | 179 | 0.55 |
| 288 | 8.54 | 34.25 | | 142 | 250 | 9.13 | 34.22 | | 26.51 | 153 | 0.63 |
| 386 | 7.48 | 34.36 | | 119 | 300 | 8.38 | 34.26 | | 26.66 | 139 | 0.71 |
| 482 | 6.64 | 34.35 | | 109 | 400 | 7.34 | 34.36 | | 26.89 | 117 | 0.84 |
| 585 | 5.98 | 34.36 | | 100 | 500 | 6.52 | 34.35 | | 26.99 | 107 | 0.96 |
| | | | | | 600 | (5.89) | (34.36) | | (27.08) | (99) | (1.07) |
| BLACK DOUGLAS; March 29, 1952; 1943 GCT;[a] 26°13'N, 118°27.5'W; sounding, 2280 fm; wind, 300°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 120.90 |
| 943 | 4.22 | 34.51 | | 69 | | | | | | | |
| 945 | 4.22 | 34.47 | | 72 | | | | | | | |
| 947 | 4.20 | 34.52 | | 68 | | | | | | | |
| 949 | 4.21 | 34.47 | | 72 | | | | | | | |
| 951 | 4.22 | 34.49 | | 71 | | | | | | | |
| 953 | 4.20 | 34.51 | | 69 | | | | | | | |
| 955 | 4.21 | 34.51 | | 69 | | | | | | | |
| 957 | 4.20 | 34.45 | | 74 | | | | | | | |
| 959 | 4.18 | 34.45 | | 73 | | | | | | | |
| 961 | 4.18 | 34.45 | | 73 | | | | | | | |
| 963 | 4.17 | 34.45 | | 73 | | | | | | | |
| CREST; March 11, 1952; 0450 GCT; 27°24'N, 114°39'W; sounding, 37 fm; wind, 300°, force 4; weather, partly cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | | 123.37 |
| 0 | 14.94 | 33.87 | 5.54 | 284 | 0 | 14.94 | 33.87 | 5.54 | 25.13 | 284 | 0.00 |
| 10 | 14.92 | 33.86 | 5.52 | 284 | 10 | 14.92 | 33.86 | 5.52 | 25.13 | 284 | 0.03 |
| 20 | 14.70 | 33.84 | 5.23 | 281 | 20 | 14.70 | 33.84 | 5.23 | 25.16 | 281 | 0.06 |
| 30 | 13.38 | 33.77 | 4.14 | 260 | 30 | 13.38 | 33.77 | 4.14 | 25.38 | 260 | 0.08 |
| 50 | 12.68 | 33.89 | 3.37 | 238 | 50 | 12.68 | 33.89 | 3.37 | 25.62 | 238 | 0.13 |
| BLACK DOUGLAS; March 28, 1952; 1323 GCT; 27°24'N, 114°39.5'W; sounding, 39 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 123.37 |
| 0 | 13.06 | 33.78 | | 253 | 0 | 13.06 | 33.78 | | 25.46 | 253 | 0.00 |
| 10 | 12.68 | 33.73 | | 250 | 10 | 12.68 | 33.73 | | 25.49 | 250 | 0.03 |
| 20 | 12.49 | 33.71 | | 248 | 20 | 12.49 | 33.71 | | 25.51 | 248 | 0.05 |
| 30 | 11.54 | 33.84 | | 221 | 30 | 11.54 | 33.84 | | 25.79 | 221 | 0.07 |
| 50 | 11.62 | 34.00 | | 211 | 50 | 11.62 | 34.00 | | 25.90 | 211 | 0.12 |
| CREST; March 11, 1952; 0706 GCT; 27°18'N, 114°51.5'W; sounding, 300 fm; wind, 280°, force 3; weather, overcast; sea, moderate; wire angle, 16°. | | | | | | | | | | | 123.40 |
| 0 | 15.29 | 33.78 | 5.99 | 298 | 0 | 15.29 | 33.78 | 5.99 | 24.99 | 298 | 0.00 |
| 24 | - | 33.78 | 5.56 | | 10 | 15.3 | 33.78 | 5.87 | 24.99 | 298 | 0.03 |
| 48 | 14.08 | 33.77 | 4.67 | 274 | 20 | 15.3 | 33.78 | 5.67 | 24.99 | 298 | 0.06 |
| 72 | 12.54 | 33.86 | 3.08 | 238 | 30 | 15.3 | 33.78 | 5.40 | 24.99 | 298 | 0.09 |
| 123 | 12.02 | 34.34 | 1.25 | 193 | 50 | 13.84 | 33.77 | 4.54 | 25.29 | 269 | 0.15 |
| 169 | 11.10 | 34.49 | 0.66 | 166 | 75 | 12.48 | 33.90 | 2.81 | 25.66 | 234 | 0.21 |
| 213 | 10.52 | 34.54 | 0.39 | 152 | 100 | 12.28 | 34.18 | 1.79 | 25.92 | 209 | 0.27 |
| 257 | 10.03 | 34.52 | 0.37 | 145 | 150 | 11.56 | 34.44 | 0.89 | 26.26 | 177 | 0.36 |
| 306 | 9.32 | 34.45 | 0.38 | 139 | 200 | 10.67 | 34.53 | 0.43 | 26.49 | 155 | 0.45 |
| 352 | 8.77 | 34.47 | 0.34 | 129 | 250 | 10.11 | 34.53 | 0.37 | 26.59 | 146 | 0.53 |
| 399 | 7.98 | 34.45 | 0.33 | 119 | 300 | 9.41 | 34.45 | 0.38 | 26.64 | 141 | 0.60 |
| 447 | 7.39 | 34.42 | 0.25 | 113 | 400 | 7.97 | 34.45 | 0.33 | 26.87 | 119 | 0.74 |
| | | | | | 500 | (6.89) | (34.41) | | (26.99) | (108) | (0.86) |

a) Test cast.

SIO

CCOFI
5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 123.40 | BLACK DOUGLAS; March 28, 1952; 1545 GCT; 27°18'N, 114°51.5'W; sounding, 400 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 33.53 | | | 0 | 14.8 | 33.53 | | 24.90 | 306 | 0.00 |
| 10 | 14.46 | 33.49 | | 302 | 10 | 14.46 | 33.49 | | 24.94 | 302 | 0.03 |
| 25 | 14.10 | - a) | | | 20 | 14.0 | 33.50 | | 25.05 | 292 | 0.06 |
| 50 | - | 33.78 | | | 30 | 14.3 | 33.72 | | 25.16 | 282 | 0.09 |
| 74 | - | 33.96 | | | 50 | 12.5 | 33.78 | | 25.57 | 243 | 0.14 |
| 98 | 11.48 | 34.20 | | 193 | 75 | 11.5 | 33.96 | | 25.90 | 212 | 0.20 |
| 148 | 11.24 | 34.51 | | 166 | 100 | 11.20 | 34.24 | | 26.17 | 186 | 0.25 |
| 194 | 10.92 | 34.52 | | 160 | 150 | 11.24 | 34.51 | | 26.37 | 166 | 0.34 |
| 240 | 10.37 | 34.52 | | 151 | 200 | 10.89 | 34.52 | | 26.44 | 160 | 0.42 |
| 286 | 9.66 | 34.51 | | 140 | 250 | 10.21 | 34.52 | | 26.56 | 148 | 0.50 |
| 385 | 8.24 | 34.46 | | 122 | 300 | 9.45 | 34.50 | | 26.67 | 138 | 0.58 |
| 481 | 7.20 | 34.40 | | 112 | 400 | 8.10 | 34.45 | | 26.85 | 121 | 0.71 |
| 584 | 5.88 | 34.40 | | 96 | 500 | 6.94 | 34.40 | | 26.98 | 109 | 0.83 |
| | | | | | 600 | (5.70) | (34.40) | | (27.14) | (94) | (0.94) |
| 123.50 | CREST; March 11, 1952; 1242 GCT; 26°58'N, 115°30.5'W; sounding, 2000 fm; wind, 260°, force 4; weather, overcast; sea, moderate; wire angle, 26°. | | | | | | | | | | |
| 0 | - | 33.91 | 5.46 | | 0 | 16.8 | 33.91 | 5.46 | 24.75 | 321 | 0.00 |
| 8 | 16.70 | 33.91 | 5.43 | 319 | 10 | 16.7 | 33.91 | 5.43 | 24.77 | 319 | 0.03 |
| 22 | - | 33.75 | 5.45 | | 20 | 16.6 | 33.84 | 5.45 | 24.74 | 322 | 0.06 |
| 44 | - | 33.68 | 5.62 | | 30 | 16.0 | 33.70 | 5.51 | 24.77 | 319 | 0.10 |
| 67 | - | 33.80 | 5.49 | | 50 | 15.3 | 33.68 | 5.62 | 24.91 | 305 | 0.16 |
| 88 | 13.15 | 33.66 | 4.03 | 264 | 75 | 15.1 | 33.75 | 5.24 | 25.01 | 296 | 0.23 |
| 132 | 10.92 | 33.99 | 2.29 | 199 | 100 | 12.20 | 33.72 | 3.10 | 25.58 | 242 | 0.30 |
| 209 | 9.80 | 34.34 | 1.32 | 155 | 150 | 10.55 | 34.12 | 2.09 | 26.19 | 183 | 0.41 |
| 249 | 9.38 | 34.34 | 0.92 | 148 | 200 | 9.90 | 34.33 | 1.49 | 26.47 | 157 | 0.50 |
| 331 | 8.14 | 34.34 | 0.70 | 130 | 250 | 9.37 | 34.34 | 0.91 | 26.56 | 148 | 0.58 |
| 412 | 7.55 | 34.40 | 0.39 | 117 | 300 | 8.60 | 34.34 | 0.82 | 26.68 | 137 | 0.65 |
| 496 | 6.84 | 34.42 | - | 106 | 400 | 7.64 | 34.39 | 0.43 | 26.87 | 119 | 0.78 |
| 664 | 5.56 | 34.37 | 0.27 | 94 | 500 | 6.81 | 34.42 | 0.33 | 27.01 | 106 | 0.90 |
| 839 | 4.80 | 34.42 | 0.35 | 82 | 600 | 5.98 | 34.38 | 0.29 | 27.09 | 98 | 1.01 |
| 1032 | 4.09 | 34.49 | 0.51 | 69 | 700 | 5.39 | 34.38 | 0.28 | 27.16 | 92 | 1.12 |
| | | | | | 800 | 4.96 | 34.41 | 0.32 | 27.23 | 84 | 1.21 |
| | | | | | 1000 | 4.20 | 34.48 | 0.50 | 27.37 | 71 | 1.39 |
| 123.50 | BLACK DOUGLAS; March 28, 1952; 2151 GCT; 26°58'N, 115°30.5'W; sounding, 1920 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 19°. | | | | | | | | | | |
| 0 | - | 33.49 | | | 0 | 16.0 | 33.49 | | 24.61 | 334 | 0.00 |
| 9 | 15.69 | 33.51 | | 326 | 10 | 15.6 | 33.51 | | 24.71 | 324 | 0.03 |
| 23 | - | 33.44a) | | | 20 | 15.2 | 33.44 | | 24.75 | 321 | 0.07 |
| 47 | - | 33.44 | | | 30 | 15.0 | 33.44 | | 24.79 | 317 | 0.10 |
| 69 | - | 33.42 | | | 50 | 14.8 | 33.43 | | 24.83 | 313 | 0.16 |
| 92 | 12.82 | 33.44 | | 274 | 75 | 14.3 | 33.42 | | 24.92 | 304 | 0.24 |
| 136 | 10.40 | 33.84 | | 202 | 100 | 11.10 | 33.46 | | 25.58 | 241 | 0.31 |
| 176 | 9.66 | 34.09 | | 171 | 150 | 10.16 | 34.00 | | 26.16 | 186 | 0.41 |
| 217 | 9.16 | 34.16 | | 158 | 200 | 9.25 | 34.13 | | 26.42 | 162 | 0.50 |
| 259 | 9.25 | 34.36 | | 145 | 250 | 9.25 | 34.36 | | 26.60 | 145 | 0.58 |
| 348 | 7.75 | 34.27 | | 130 | 300 | 8.61 | 34.32 | | 26.67 | 138 | 0.66 |
| 437 | 7.18 | 34.38 | | 114 | 400 | 7.38 | 34.35 | | 26.87 | 119 | 0.79 |
| 535 | 6.20 | 34.38 | | 101 | 500 | 6.57 | 34.38 | | 27.01 | 106 | 0.91 |

a) The same sample bottle number was listed on Stations 123.40 and 123.50. From the order of titration, it was assumed that the sample was drawn on Station 123.50.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; March 11, 1952; 1837 GCT; 26°37.5'N, 116°08.5'W; sounding, 2100 fm; wind, 270°, force 4; weather, cloudy; sea, rough; wire angle, 13°. | | | | | | | | | | | 123.60 |
| 0 | - | 33.98 | 5.39 | | 0 | 17.1 | 33.98 | 5.39 | 24.73 | 323 | 0.00 |
| 9 | 17.06 | 33.98 | 5.40 | 322 | 10 | 17.0 | 33.98 | 5.40 | 24.75 | 320 | 0.03 |
| 24 | - | 33.98 | 5.39 | | 20 | 17.0 | 33.98 | 5.40 | 24.75 | 320 | 0.06 |
| 53 | - | 33.98 | 5.40 | | 30 | 17.0 | 33.98 | 5.40 | 24.75 | 320 | 0.10 |
| 77 | - | 33.87 | 5.22 | | 50 | 16.9 | 33.98 | 5.40 | 24.78 | 318 | 0.16 |
| 105 | 12.38 | 33.58 | 4.58 | 255 | 75 | 16.7 | 33.89 | 5.24 | 24.75 | 320 | 0.24 |
| 155 | 10.34 | 34.04 | 2.47 | 186 | 100 | 13.9 | 33.58 | 4.73 | 25.13 | 284 | 0.32 |
| 259 | 9.32 | 34.46 | 0.87 | 139 | 150 | 10.46 | 33.99 | 2.70 | 26.11 | 192 | 0.44 |
| 305 | 9.08 | 34.47 | 0.50 | 134 | 200 | 9.77 | 34.33 | 1.65 | 26.49 | 155 | 0.53 |
| 410 | 8.01 | 34.47 | 0.34 | 118 | 250 | 9.38 | 34.45 | 0.98 | 26.65 | 140 | 0.60 |
| 510 | 6.89 | 34.45 | 0.28 | 105 | 300 | 9.12 | 34.47 | 0.52 | 26.70 | 135 | 0.67 |
| 611 | 5.99 | 34.45 | 0.24 | 93 | 400 | 8.16 | 34.47 | 0.36 | 26.85 | 120 | 0.81 |
| 808 | 4.80 | 34.48 | 0.32 | 78 | 500 | 7.00 | 34.45 | 0.30 | 27.01 | 106 | 0.93 |
| 1011 | 4.14 | 34.49 | 0.51 | 70 | 600 | 6.07 | 34.45 | 0.25 | 27.13 | 94 | 1.04 |
| 1211 | 3.58 | 34.51 | 0.74 | 63 | 700 | 5.37 | 34.47 | 0.28 | 27.23 | 85 | 1.13 |
| | | | | | 800 | 4.83 | 34.48 | 0.32 | 27.30 | 78 | 1.22 |
| | | | | | 1000 | 4.17 | 34.49 | 0.50 | 27.38 | 70 | 1.39 |
| BLACK DOUGLAS; March 29, 1952; 0343 GCT; 26°38.5'N, 116°09'W; sounding, 2160 fm; wind, 300°, force 1; weather, partly cloudy; sea, slight; wire angle, 07°. | | | | | | | | | | | 123.60 |
| 0 | - | 33.87 | | | 0 | 16.8 | 33.87 | | 24.71 | 324 | 0.00 |
| 10 | 16.78 | 33.86 | | 324 | 10 | 16.78 | 33.86 | | 24.71 | 324 | 0.03 |
| 25 | - | 33.80 | | | 20 | 16.1 | 33.82 | | 24.84 | 312 | 0.06 |
| 49 | - | 33.82 | | | 30 | 16.0 | 33.80 | | 24.85 | 311 | 0.10 |
| 73 | - | 33.82 | | | 50 | 16.0 | 33.82 | | 24.86 | 310 | 0.16 |
| 96 | 15.45 | 33.73 | | 305 | 75 | 16.0 | 33.82 | | 24.86 | 310 | 0.24 |
| 145 | 10.76 | 33.84 | | 208 | 100 | 12.70 | 33.73 | | 25.49 | 250 | 0.31 |
| 189 | 9.64 | 34.07 | | 172 | 150 | 10.52 | 33.87 | | 26.00 | 201 | 0.42 |
| 234 | 9.41 | 34.33 | | 150 | 200 | 9.58 | 34.14 | | 26.37 | 166 | 0.51 |
| 279 | 9.01 | 34.40 | | 138 | 250 | 9.30 | 34.37 | | 26.60 | 145 | 0.59 |
| 375 | 8.08 | 34.40 | | 125 | 300 | 8.81 | 34.40 | | 26.70 | 135 | 0.67 |
| 470 | 7.00 | 34.40 | | 110 | 400 | 7.74 | 34.40 | | 26.86 | 120 | 0.80 |
| 573 | 6.08 | 34.42 | | 97 | 500 | 6.74 | 34.40 | | 27.00 | 106 | 0.92 |
| CREST; March 10, 1952; 2312 GCT; 26°55'N, 114°05'W; sounding, 40 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | | 127.34 |
| 0 | 16.25 | 33.95 | 5.60 | 306 | 0 | 16.25 | 33.95 | 5.60 | 24.90 | 306 | 0.00 |
| 10 | 15.78 | 33.98 | 5.60 | 294 | 10 | 15.78 | 33.98 | 5.60 | 25.03 | 294 | 0.03 |
| 20 | 15.36 | 33.93 | 5.32 | 288 | 20 | 15.36 | 33.93 | 5.32 | 25.09 | 288 | 0.06 |
| 30 | 15.14 | 33.93 | 5.21 | 284 | 30 | 15.14 | 33.93 | 5.21 | 25.14 | 284 | 0.09 |
| 50 | 12.76 | 33.68 | 4.12 | 255 | 50 | 12.76 | 33.68 | 4.12 | 25.44 | 255 | 0.14 |
| BLACK DOUGLAS; March 28, 1952; 0818 GCT; 26°55.5'N, 114°06'W; sounding, 47 fm; wind, calm; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | | 127.34 |
| 0 | 14.28 | 33.64 | | 287 | 0 | 14.28 | 33.64 | | 25.10 | 287 | 0.00 |
| 10 | 13.84 | 33.68 | | 276 | 10 | 13.84 | 33.68 | | 25.22 | 276 | 0.03 |
| 20 | 13.46 | 33.71 | | 266 | 20 | 13.46 | 33.71 | | 25.32 | 266 | 0.06 |
| 30 | 12.77 | 33.70 | | 254 | 30 | 12.77 | 33.70 | | 25.45 | 254 | 0.08 |
| 50 | 12.02 | 33.73 | | 238 | 50 | 12.02 | 33.73 | | 25.62 | 238 | 0.13 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 127.40 | CREST; March 10, 1952; 1913 GCT; 26°43'N, 114°35'W; sounding, 2000 fm; wind, 360°, force 2; weather, partly cloudy; sea, rough; wire angle, 06°. | | | | | | | | | | |
| 0 | - | 34.14 | 5.42 | | 0 | 17.3 | 34.14 | 5.42 | 24.80 | 315 | 0.00 |
| 10 | 17.04 | 34.18 | 5.40 | 307 | 10 | 17.04 | 34.18 | 5.40 | 24.90 | 307 | 0.03 |
| 25 | - | 34.18 | 5.37 | | 20 | 17.0 | 34.18 | 5.38 | 24.90 | 306 | 0.06 |
| 50 | - | 34.18 | 5.39 | | 30 | 17.0 | 34.18 | 5.37 | 24.90 | 306 | 0.09 |
| 74 | - | 34.09 | 3.49 | | 50 | 17.0 | 34.18 | 5.39 | 24.90 | 306 | 0.15 |
| 97 | 13.60 | 34.14 | 1.98 | 237 | 75 | 15.0 | 34.09 | 3.46 | 25.29 | 269 | 0.23 |
| 148 | 11.37 | 34.27 | 1.51 | 186 | 100 | 13.30 | 34.15 | 1.90 | 25.69 | 231 | 0.29 |
| 239 | 9.82 | 34.43 | 0.79 | 149 | 150 | 11.29 | 34.27 | 1.50 | 26.17 | 185 | 0.39 |
| 286 | 9.38 | 34.49 | 0.50 | 137 | 200 | 10.27 | 34.36 | 1.17 | 26.43 | 161 | 0.48 |
| 382 | 8.27 | 34.47 | 0.29 | 122 | 250 | 9.72 | 34.45 | 0.69 | 26.59 | 146 | 0.56 |
| 474 | 7.31 | 34.51 | 0.24 | 106 | 300 | 9.24 | 34.49 | 0.44 | 26.70 | 135 | 0.64 |
| 571 | 6.36 | 34.43 | 0.21 | 99 | 400 | 8.07 | 34.48 | 0.29 | 26.88 | 118 | 0.77 |
| 762 | 5.05 | 34.45 | 0.28 | 82 | 500 | 7.09 | 34.50 | 0.23 | 27.03 | 103 | 0.89 |
| 949 | 4.32 | 34.55 | 0.48 | 67 | 600 | 6.11 | 34.43 | 0.21 | 27.11 | 96 | 0.99 |
| 1151 | 3.74 | 34.49 | 0.62 | 66 | 700 | 5.40 | 34.44 | 0.24 | 27.21 | 87 | 1.09 |
| | | | | | 800 | 4.87 | 34.47 | 0.30 | 27.29 | 79 | 1.19 |
| | | | | | 1000 | 4.17 | 34.55 | 0.54 | 27.43 | 66 | 1.35 |
| 127.40 | BLACK DOUGLAS; March 28, 1952; 0449 GCT; 26°43.5'N, 114°29.5'W; sounding, 1700 fm; wind, 320°, force 1; weather, clear; sea, slight; wire angle, 18°. | | | | | | | | | | |
| 0 | - | 33.57 | | | 0 | 15.10 | 33.57 | | 24.87 | 309 | 0.00 |
| 10 | 14.92 | 33.55 | | 307 | 10 | 14.92 | 33.55 | | 24.89 | 307 | 0.03 |
| 24 | - | 33.57 | | | 20 | 14.60 | 33.56 | | 24.97 | 300 | 0.06 |
| 47 | - | 33.60 | | | 30 | 14.50 | 33.58 | | 25.01 | 296 | 0.09 |
| 69 | - | 33.48 | | | 50 | 13.70 | 33.60 | | 25.19 | 279 | 0.15 |
| 92 | 11.14 | 33.80 | | 217 | 75 | 11.20 | 33.48 | | 25.58 | 242 | 0.21 |
| 137 | 11.04 | 34.36 | | 174 | 100 | 11.30 | 33.98 | | 25.95 | 207 | 0.27 |
| 178 | 10.24 | 34.34 | | 162 | 150 | 10.92 | 34.35 | | 26.30 | 173 | 0.37 |
| 218 | 9.90 | 34.47 | | 147 | 200 | 10.05 | 34.40 | | 26.49 | 155 | 0.45 |
| 260 | 9.57 | 34.51 | | 139 | 250 | 9.66 | 34.51 | | 26.65 | 140 | 0.53 |
| 350 | 8.53 | 34.49 | | 124 | 300 | 9.12 | 34.51 | | 26.74 | 132 | 0.60 |
| 439 | 7.40 | 34.45 | | 111 | 400 | 7.88 | 34.47 | | 26.90 | 117 | 0.73 |
| 537 | 6.48 | 34.47 | | 98 | 500 | 6.79 | 34.46 | | 27.04 | 103 | 0.84 |
| 127.50 | CREST; March 10, 1952; 1353 GCT; 26°23'N, 115°09'W; sounding, 2010 fm; wind, 290°, force 3; weather, partly cloudy; sea, moderate; wire angle, 22°. | | | | | | | | | | |
| 0 | - | 33.82 | 5.40 | | 0 | 16.4 | 33.82 | 5.40 | 24.77 | 319 | 0.00 |
| 9 | 16.28 | 33.82 | 5.44 | 316 | 10 | 16.3 | 33.82 | 5.44 | 24.79 | 316 | 0.03 |
| 23 | - | 33.86 | 5.41 | | 20 | 16.3 | 33.86 | 5.42 | 24.82 | 314 | 0.06 |
| 46 | - | 33.80 | 5.43 | | 30 | 16.3 | 33.85 | 5.41 | 24.82 | 314 | 0.09 |
| 69 | 15.61 | 33.68 | 5.42 | 312 | 50 | 16.2 | 33.77 | 5.43 | 24.78 | 318 | 0.16 |
| 91 | 15.33 | 33.77 | 5.05 | 299 | 75 | 15.60 | 33.69 | 5.38 | 24.85 | 311 | 0.24 |
| 137 | 11.20 | 33.82 | 3.14 | 217 | 100 | 14.10 | 33.78 | 4.73 | 25.24 | 273 | 0.31 |
| 222 | 9.40 | 34.25 | 1.68 | 155 | 150 | 10.82 | 33.84 | 2.81 | 25.93 | 209 | 0.43 |
| 266 | 8.97 | 34.31 | 1.12 | 144 | 200 | 9.74 | 34.16 | 2.03 | 26.36 | 167 | 0.53 |
| 356 | 7.93 | 34.36 | 0.57 | 125 | 250 | 9.12 | 34.29 | 1.30 | 26.56 | 148 | 0.61 |
| 442 | 7.17 | 34.38 | 0.32 | 114 | 300 | 8.57 | 34.33 | 0.83 | 26.68 | 137 | 0.68 |
| 532 | 6.43 | 34.40 | 0.33 | 102 | 400 | 7.53 | 34.37 | 0.42 | 26.87 | 119 | 0.82 |
| 712 | 5.34 | 34.43 | 0.23 | 87 | 500 | 6.69 | 34.39 | 0.33 | 27.00 | 106 | 0.94 |
| 895 | 4.50 | 34.47 | 0.42 | 75 | 600 | 5.98 | 34.41 | 0.29 | 27.11 | 96 | 1.05 |
| 1091 | 3.91 | 34.54 | 0.59 | 64 | 700 | 5.41 | 34.43 | 0.23 | 27.20 | 88 | 1.15 |
| | | | | | 800 | 4.90 | 34.45 | 0.29 | 27.27 | 81 | 1.24 |
| | | | | | 1000 | 4.17 | 34.50 | 0.52 | 27.39 | 69 | 1.41 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; March 27, 1952; 2259 GCT; 26°23.5'N, 115°08'W; sounding, 1880 fm; wind, 340°, force 2; weather, cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | | 127.50 |
| 0 | - | 33.58 | | | 0 | 15.7 | 33.58 | | 24.74 | 321 | 0.00 |
| 9 | 15.46 | 33.60 | | 315 | 10 | 15.5 | 33.60 | | 24.80 | 315 | 0.03 |
| 24 | - | 33.59 | | | 20 | 15.4 | 33.59 | | 24.82 | 314 | 0.06 |
| 48 | - | 33.55 | | | 30 | 15.0 | 33.58 | | 24.90 | 306 | 0.09 |
| 71 | - | 33.58 | | | 50 | 15.0 | 33.55 | | 24.88 | 309 | 0.16 |
| 94 | 13.35 | 33.64 | | 269 | 75 | 14.5 | 33.59 | | 25.01 | 295 | 0.23 |
| 142 | 10.73 | 34.00 | | 195 | 100 | 12.50 | 33.66 | | 25.47 | 252 | 0.30 |
| 185 | 10.28 | 34.25 | | 169 | 150 | 10.59 | 34.05 | | 26.13 | 189 | 0.41 |
| 228 | 10.08 | 34.45 | | 151 | 200 | 10.21 | 34.34 | | 26.42 | 162 | 0.50 |
| 273 | 9.74 | 34.43 | | 147 | 250 | 9.95 | 34.44 | | 26.54 | 150 | 0.58 |
| 367 | 8.28 | 34.45 | | 124 | 300 | 9.31 | 34.43 | | 26.64 | 141 | 0.66 |
| 459 | 7.44 | 34.45 | | 112 | 400 | 7.97 | 34.45 | | 26.87 | 119 | 0.79 |
| 558 | 6.40 | 34.45 | | 98 | 500 | 7.05 | 34.45 | | 27.00 | 107 | 0.91 |
| CREST; March 10, 1952; 0759 GCT; 26°03'N, 115°47'W; sounding, 2050 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 22°. | | | | | | | | | | | 127.60 |
| 0 | - | 33.93 | 5.40 | | 0 | 17.0 | 33.93 | 5.40 | 24.71 | 324 | 0.00 |
| 9 | 16.92 | 33.93 | 5.40 | 322 | 10 | 16.9 | 33.93 | 5.40 | 24.74 | 322 | 0.03 |
| 23 | - | 33.87 | 5.42 | | 20 | 16.9 | 33.88 | 5.42 | 24.70 | 325 | 0.06 |
| 47 | - | 33.91 | 5.37 | | 30 | 16.9 | 33.90 | 5.42 | 24.71 | 324 | 0.10 |
| 69 | - | 33.91 | 5.37 | | 50 | 16.8 | 33.91 | 5.37 | 24.75 | 321 | 0.16 |
| 90 | 16.84 | 33.89 | 5.32 | 323 | 75 | 16.7 | 33.90 | 5.36 | 24.76 | 319 | 0.24 |
| 135 | 12.19 | 33.77 | 3.84 | 238 | 100 | 15.30 | 33.87 | 5.26 | 25.06 | 291 | 0.32 |
| 215 | 9.50 | 34.16 | 2.20 | 164 | 150 | 11.33 | 33.78 | 3.54 | 25.79 | 222 | 0.45 |
| 256 | 9.40 | 34.31 | 1.24 | 151 | 200 | 9.70 | 34.03 | 2.60 | 26.27 | 176 | 0.55 |
| 343 | 8.55 | 34.36 | 0.60 | 134 | 250 | 9.42 | 34.30 | 1.34 | 26.52 | 152 | 0.64 |
| 427 | 7.57 | 34.39 | 0.41 | 118 | 300 | 9.09 | 34.35 | 0.79 | 26.62 | 143 | 0.71 |
| 514 | 6.74 | 34.41 | 0.30 | 106 | 400 | 7.88 | 34.38 | 0.48 | 26.83 | 123 | 0.85 |
| 689 | 5.55 | 34.43 | 0.24 | 90 | 500 | 6.87 | 34.41 | 0.31 | 26.99 | 107 | 0.97 |
| 868 | 4.65 | 34.45 | 0.33 | 78 | 600 | 6.10 | 34.42 | 0.28 | 27.10 | 97 | 1.08 |
| 1057 | 3.99 | 34.52 | 0.53 | 66 | 700 | 5.49 | 34.43 | 0.24 | 27.19 | 89 | 1.18 |
| | | | | | 800 | 4.96 | 34.44 | 0.29 | 27.26 | 82 | 1.28 |
| | | | | | 1000 | 4.16 | 34.49 | 0.48 | 27.39 | 70 | 1.45 |
| BLACK DOUGLAS; March 27, 1952; 1618 GCT; 26°03.5'N, 115°46.5'W; sounding, 2100 fm; wind, 320°, force 2; weather, cloudy; sea, slight; wire angle, 16°. | | | | | | | | | | | 127.60 |
| 0 | - | 33.84 | | | 0 | 16.6 | 33.84 | | 24.74 | 322 | 0.00 |
| 9 | 16.58 | 33.82 | | 323 | 10 | 16.6 | 33.82 | | 24.72 | 323 | 0.03 |
| 24 | - | 33.86 | | | 20 | 16.5 | 33.84 | | 24.76 | 319 | 0.06 |
| 48 | - | 33.78 | | | 30 | 16.5 | 33.86 | | 24.78 | 318 | 0.10 |
| 71 | - | 33.82 | | | 50 | 16.5 | 33.78 | | 24.72 | 324 | 0.16 |
| 93 | 16.36 | 33.76 | | 322 | 75 | 16.5 | 33.82 | | 24.75 | 321 | 0.24 |
| 139 | 11.92 | 33.74 | | 235 | 100 | 16.10 | 33.75 | | 24.78 | 317 | 0.32 |
| 180 | 9.76 | 33.86 | | 190 | 150 | 10.87 | 33.76 | | 25.85 | 215 | 0.46 |
| 221 | 9.31 | 34.11 | | 164 | 200 | 9.53 | 34.08 | | 26.33 | 170 | 0.56 |
| 264 | 8.45 | 34.11 | | 151 | 250 | 8.71 | 34.11 | | 26.49 | 155 | 0.64 |
| 356 | 7.93 | 34.36 | | 125 | 300 | 8.22 | 34.15 | | 26.59 | 145 | 0.72 |
| 446 | 7.14 | 34.36 | | 115 | 400 | 7.55 | 34.36 | | 26.86 | 120 | 0.85 |
| 546 | 6.48 | 34.38 | | 105 | 500 | 6.78 | 34.37 | | 26.97 | 109 | 0.98 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 130.30 | CREST; March 9, 1952; 0807 GCT; 26°29'N, 113°29'W; sounding, 44 fm; wind, 310°, force 5; weather, cloudy; sea, rough; wire angle, 02°. | | | | | | | | | | |
| 0 | 16.95 | 34.22 | 5.35 | 302 | 0 | 16.95 | 34.22 | 5.35 | 24.95 | 302 | 0.00 |
| 10 | 16.94 | 34.22 | 5.33 | 301 | 10 | 16.94 | 34.22 | 5.33 | 24.95 | 301 | 0.03 |
| 20 | 16.94 | 34.22 | 5.30 | 301 | 20 | 16.94 | 34.22 | 5.30 | 24.95 | 301 | 0.06 |
| 30 | 16.94 | 34.22 | 5.33 | 301 | 30 | 16.94 | 34.22 | 5.33 | 24.95 | 301 | 0.09 |
| 50 | 16.90 | 34.22 | 5.17 | 301 | 50 | 16.90 | 34.22 | 5.17 | 24.96 | 301 | 0.15 |
| 130.30 | BLACK DOUGLAS; March 26, 1952; 1512 GCT; 26°29'N, 113°29'W; sounding, 45 fm; wind, 320°, force 2; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 14.20 | 33.87 | | 269 | 0 | 14.20 | 33.87 | | 25.29 | 269 | 0.00 |
| 10 | 13.86 | 33.84 | | 264 | 10 | 13.86 | 33.84 | | 25.34 | 264 | 0.03 |
| 20 | 13.51 | 33.89 | | 254 | 20 | 13.51 | 33.89 | | 25.45 | 254 | 0.05 |
| 30 | 12.92 | 34.02 | | 233 | 30 | 12.92 | 34.02 | | 25.67 | 233 | 0.08 |
| 51 | 11.74 | 34.23 | | 196 | 50 | 11.74 | 34.23 | | 26.06 | 196 | 0.12 |
| 130.35 | CREST; March 9, 1952; 1102 GCT; 26°19'N, 113°49'W; sounding, 250 fm; wind, 260°, force 4; weather, overcast; sea, rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 16.82 | 34.09 | 5.49 | 308 | 0 | 16.82 | 34.09 | 5.49 | 24.88 | 308 | 0.00 |
| 9 | 16.82 | 34.07 | 5.41 | 310 | 10 | 16.82 | 34.07 | 5.41 | 24.86 | 310 | 0.03 |
| 24 | 16.81 | 34.07 | 5.41 | 309 | 20 | 16.82 | 34.07 | 5.41 | 24.86 | 310 | 0.06 |
| 48 | 16.56 | 34.02 | 5.42 | 308 | 30 | 16.78 | 34.07 | 5.42 | 24.87 | 309 | 0.09 |
| 71 | 14.00 | 33.80 | 4.17 | 270 | 50 | 16.51 | 33.99 | 5.42 | 24.87 | 309 | 0.15 |
| 94 | 13.12 | 34.09 | 2.40 | 232 | 75 | 13.78 | 33.81 | 3.80 | 25.33 | 265 | 0.23 |
| 188 | 11.15 | 34.60 | 0.47 | 158 | 100 | 12.96 | 34.18 | 2.17 | 25.79 | 222 | 0.29 |
| 232 | 10.52 | 34.60 | 0.30 | 148 | 150 | 11.85 | 34.53 | 0.91 | 26.27 | 176 | 0.39 |
| 276 | 10.05 | 34.54 | 0.30 | 144 | 200 | 10.95 | 34.60 | 0.39 | 26.49 | 155 | 0.47 |
| 326 | 9.28 | 34.54 | 0.24 | 132 | 250 | 10.31 | 34.58 | 0.30 | 26.59 | 146 | 0.55 |
| 377 | 8.30 | 34.51 | 0.24 | 120 | 300 | 9.71 | 34.53 | 0.27 | 26.65 | 139 | 0.63 |
| 130.35 | BLACK DOUGLAS; March 26, 1952; 1757 GCT; 26°19'N, 113°48.5'W; sounding, 110 fm; wind, 310°, force 2; weather, cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | 15.58 | 33.80 | | 302 | 0 | 15.58 | 33.80 | | 24.94 | 302 | 0.00 |
| 10 | 15.14 | 33.78 | | 295 | 10 | 15.14 | 33.78 | | 25.02 | 295 | 0.03 |
| 25 | 14.05 | 33.62 | | 284 | 20 | 14.40 | 33.64 | | 25.07 | 290 | 0.06 |
| 50 | 13.05 | 33.66 | | 262 | 30 | 13.81 | 33.61 | | 25.17 | 280 | 0.09 |
| 75 | 12.66 | 34.09 | | 223 | 50 | 13.05 | 33.66 | | 25.37 | 262 | 0.14 |
| 101 | 12.04 | 34.27 | | 198 | 75 | 12.66 | 34.09 | | 25.78 | 223 | 0.20 |
| 125 | 11.61 | 34.33 | | 186 | 100 | 12.09 | 34.26 | | 26.02 | 200 | 0.26 |
| 155 | 11.15 | 34.45 | | 169 | 150 | 11.22 | 34.45 | | 26.33 | 171 | 0.35 |
| 130.40 | CREST; March 9, 1952; 0209 GCT; 26°08.5'N, 114°08'W; sounding, 1300 fm; wind, 310°, force 5; weather, overcast; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | - | 34.09 | 5.42 | | 0 | 17.0 | 34.09 | 5.42 | 24.84 | 312 | 0.00 |
| 9 | 16.92 | 34.06 | 5.28 | 313 | 10 | 16.9 | 34.06 | 5.29 | 24.84 | 312 | 0.03 |
| 23 | - | 34.13 | 5.31 | | 20 | 16.9 | 34.12 | 5.30 | 24.88 | 308 | 0.06 |
| 52 | - | 34.11 | 5.25 | | 30 | 16.8 | 34.14 | 5.31 | 24.92 | 304 | 0.09 |
| 75 | - | 33.84 | 4.54 | | 50 | 16.5 | 34.12 | 5.26 | 24.98 | 299 | 0.15 |
| 103 | 13.20 | 34.22 | 1.74 | 224 | 75 | 15.6 | 33.84 | 4.54 | 24.97 | 300 | 0.23 |
| 153 | 12.13 | 34.51 | 0.64 | 182 | 100 | 13.5 | 34.15 | 2.00 | 25.65 | 235 | 0.30 |
| 258 | 10.82 | 34.65 | 0.27 | 149 | 150 | 12.18 | 34.50 | 0.67 | 26.19 | 184 | 0.40 |
| 303 | 10.22 | 34.61 | 0.24 | 142 | 200 | 11.49 | 34.63 | 0.41 | 26.42 | 162 | 0.49 |
| 408 | 8.38 | 34.50 | 0.24 | 121 | 250 | 10.91 | 34.65 | 0.28 | 26.54 | 150 | 0.57 |
| 509 | 7.11 | 34.45 | 0.19 | 107 | 300 | 10.28 | 34.61 | 0.24 | 26.62 | 143 | 0.65 |
| 612 | 6.20 | 34.47 | 0.21 | 94 | 400 | 8.49 | 34.51 | 0.24 | 26.84 | 122 | 0.79 |
| 811 | 5.01 | 34.51 | 0.26 | 78 | 500 | 7.20 | 34.45 | 0.19 | 26.98 | 109 | 0.91 |
| 1013 | 4.16 | 34.53 | 0.59 | 67 | 600 | 6.30 | 34.47 | 0.21 | 27.12 | 96 | 1.02 |
| 1212 | 3.60 | 34.56 | 0.78 | 59 | 700 | 5.61 | 34.49 | 0.23 | 27.22 | 86 | 1.12 |
| | | | | | 800 | 5.07 | 34.51 | 0.26 | 27.30 | 78 | 1.21 |
| | | | | | 1000 | 4.22 | 34.53 | 0.58 | 27.41 | 68 | 1.38 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BLACK DOUGLAS; March 26, 1952; 2107 GCT; 26°09'N, 114°07.5'W; sounding, 1150 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 10°. 130.40

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.28 | | 0 | 17.4 | 34.28 | | 24.89 | 308 | 0.00 |
| 10 | 16.88 | 34.25 | | 298 | 10 | 16.88 | 34.25 | | 24.99 | 298 | 0.03 |
| 24 | - | 34.24 | | | 20 | 16.9 | 34.24 | | 24.97 | 299 | 0.06 |
| 49 | - | 34.25 | | | 30 | 16.9 | 34.24 | | 24.97 | 299 | 0.09 |
| 73 | - | 34.02 | | | 50 | 16.9 | 34.25 | | 24.98 | 298 | 0.15 |
| 97 | 12.78 | 34.16 | | 220 | 75 | 13.8 | 34.02 | | 25.49 | 250 | 0.22 |
| 148 | 11.66 | 34.39 | | 183 | 100 | 12.50 | 34.18 | | 25.88 | 213 | 0.28 |
| 193 | 11.30 | 34.58 | | 162 | 150 | 11.64 | 34.40 | | 26.21 | 182 | 0.38 |
| 285 | 9.61 | 34.52 | | 139 | 200 | 11.23 | 34.58 | | 26.43 | 161 | 0.47 |
| 381 | 8.49 | 34.52 | | 122 | 250 | 10.23 | 34.54 | | 26.57 | 147 | 0.55 |
| 472 | 7.35 | 34.45 | | 111 | 300 | 9.42 | 34.52 | | 26.69 | 136 | 0.62 |
| 568 | 6.28 | 34.43 | | 98 | 400 | 8.28 | 34.51 | | 26.87 | 119 | 0.75 |
| 757 | 5.06 | 34.47 | | 81 | 500 | 7.02 | 34.44 | | 27.00 | 107 | 0.87 |
| 945 | 4.22 | 34.54 | | 67 | 600 | 6.02 | 34.43 | | 27.12 | 95 | 0.98 |
| 1146 | 3.82 | 34.55 | | 62 | 700 | 5.38 | 34.45 | | 27.22 | 86 | 1.08 |
| | | | | | 800 | 4.83 | 34.49 | | 27.31 | 77 | 1.17 |
| | | | | | 1000 | 4.09 | 34.55 | | 27.44 | 65 | 1.33 |

CREST; March 9, 1952; 2012 GCT; 25°49'N, 114°47'W; sounding, 2050 fm; wind, 310°, force 4; weather, cloudy; sea, very rough; wire angle, 17°. 130.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.04 | 5.39 | | 0 | 17.1 | 34.04 | 5.39 | 24.77 | 318 | 0.00 |
| 9 | 16.95 | 34.05 | 5.41 | 314 | 10 | 16.9 | 34.05 | 5.41 | 24.83 | 313 | 0.03 |
| 23 | - | 34.02 | 5.39 | | 20 | 16.9 | 34.03 | 5.39 | 24.81 | 314 | 0.06 |
| 52 | - | 34.04 | 5.35 | | 30 | 16.8 | 34.02 | 5.37 | 24.83 | 313 | 0.09 |
| 75 | - | 33.75 | 4.72 | | 50 | 16.7 | 34.04 | 5.36 | 24.87 | 309 | 0.16 |
| 103 | 11.86 | 33.68 | 3.63 | 239 | 75 | 15.2 | 33.75 | 4.72 | 24.99 | 298 | 0.23 |
| 153 | 10.57 | 34.07 | 2.24 | 188 | 100 | 11.9 | 33.68 | 3.74 | 25.60 | 239 | 0.30 |
| 256 | 9.44 | 34.40 | 0.76 | 145 | 150 | 10.61 | 34.05 | 2.32 | 26.13 | 190 | 0.41 |
| 302 | 8.82 | 34.40 | 0.57 | 135 | 200 | 10.04 | 34.29 | 1.39 | 26.41 | 163 | 0.50 |
| 406 | 7.90 | 34.42 | 0.29 | 121 | 250 | 9.51 | 34.39 | 0.79 | 26.58 | 147 | 0.58 |
| 505 | 6.72 | 34.40 | 0.27 | 106 | 300 | 8.86 | 34.40 | 0.58 | 26.69 | 136 | 0.65 |
| | | | | | 400 | 7.97 | 34.42 | 0.29 | 26.84 | 122 | 0.79 |
| | | | | | 500 | 6.79 | 34.40 | 0.27 | 27.00 | 107 | 0.91 |

BLACK DOUGLAS; March 27, 1952; 0339 GCT; 25°49'N, 114°46'W; sounding, 2000 fm; wind, 300°, force 1; weather, partly cloudy; sea, slight; wire angle, 08°. 130.50

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.76 | | 0 | 16.2 | 33.76 | | 24.77 | 319 | 0.00 |
| 10 | 15.81 | 33.77 | | 310 | 10 | 15.81 | 33.77 | | 24.86 | 310 | 0.03 |
| 25 | - | 33.77 | | | 20 | 15.3 | 33.77 | | 24.98 | 299 | 0.06 |
| 49 | - | 33.73 | | | 30 | 15.1 | 33.76 | | 25.01 | 295 | 0.09 |
| 73 | - | 33.69 | | | 50 | 15.0 | 33.73 | | 25.01 | 295 | 0.15 |
| 97 | 11.72 | 33.64 | | 239 | 75 | 13.8 | 33.69 | | 25.24 | 274 | 0.22 |
| 147 | 10.45 | 34.11 | | 183 | 100 | 11.40 | 33.64 | | 25.67 | 233 | 0.29 |
| 193 | 10.14 | 34.37 | | 158 | 150 | 10.43 | 34.14 | | 26.23 | 180 | 0.39 |
| 238 | 9.62 | 34.43 | | 145 | 200 | 10.07 | 34.38 | | 26.48 | 156 | 0.48 |
| 284 | 9.21 | 34.45 | | 138 | 250 | 9.51 | 34.44 | | 26.62 | 143 | 0.55 |
| 381 | 8.18 | 34.43 | | 124 | 300 | 9.07 | 34.45 | | 26.70 | 135 | 0.63 |
| 475 | 7.03 | 34.40 | | 110 | 400 | 7.94 | 34.42 | | 26.85 | 121 | 0.76 |
| 578 | 6.23 | 34.42 | | 98 | 500 | 6.81 | 34.40 | | 26.99 | 107 | 0.88 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 130.60 | CREST; March 10, 1952; 0156 GCT; 25°29'N, 115°24'W; sounding, 2500 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 11°. | | | | | | | | | | |
| 0 | - | 33.84 | 5.11 | | 0 | 16.3 | 33.84 | 5.11 | 24.81 | 315 | 0.00 |
| 10 | 16.28 | 33.83 | 5.08 | 315 | 10 | 16.28 | 33.83 | 5.08 | 24.80 | 315 | 0.03 |
| 24 | - | 33.84 | 5.52 | | 20 | 16.3 | 33.84 | 5.48 | 24.81 | 315 | 0.06 |
| 53 | - | 33.83 | 5.46 | | 30 | 16.2 | 33.85 | 5.52 | 24.84 | 312 | 0.09 |
| 77 | - | 33.68 | 5.59 | | 50 | 16.1 | 33.84 | 5.46 | 24.85 | 311 | 0.16 |
| 106 | 12.37 | 33.53 | 4.49 | 259 | 75 | 15.4 | 33.69 | 5.59 | 24.90 | 307 | 0.23 |
| 156 | 10.58 | 34.02 | 2.47 | 191 | 100 | 12.9 | 33.54 | 4.91 | 25.30 | 268 | 0.31 |
| 261 | 9.59 | 34.43 | 0.72 | 145 | 150 | 10.67 | 33.97 | 2.67 | 26.05 | 197 | 0.42 |
| 307 | 8.96 | 34.47 | 0.50 | 132 | 200 | 10.13 | 34.25 | 1.49 | 26.36 | 167 | 0.52 |
| 412 | 7.85 | 34.43 | 0.29 | 119 | 250 | 9.70 | 34.41 | 0.83 | 26.56 | 148 | 0.60 |
| 512 | 6.81 | 34.43 | 0.25 | 105 | 300 | 9.06 | 34.47 | 0.52 | 26.71 | 134 | 0.67 |
| 614 | 6.08 | 34.43 | 0.28 | 96 | 400 | 7.98 | 34.44 | 0.30 | 26.86 | 120 | 0.81 |
| 813 | 4.90 | 34.47 | 0.30 | 79 | 500 | 6.94 | 34.43 | 0.25 | 27.00 | 107 | 0.93 |
| 1017 | 4.11 | 34.49 | 0.51 | 70 | 600 | 6.19 | 34.43 | 0.26 | 27.10 | 97 | 1.04 |
| 1217 | 3.56 | 34.54 | 0.77 | 61 | 700 | 5.56 | 34.45 | 0.28 | 27.19 | 88 | 1.14 |
| | | | | | 800 | 4.99 | 34.47 | 0.30 | 27.28 | 80 | 1.23 |
| | | | | | 1000 | 4.17 | 34.49 | 0.50 | 27.38 | 70 | 1.40 |
| 130.60 | BLACK DOUGLAS; March 27, 1952; 1038 GCT; 25°29'N, 115°24'W; sounding, 2100 fm; wind, 300°, force 2; weather, clear; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | - | 33.87 | | | 0 | 16.6 | 33.87 | | 24.76 | 319 | 0.00 |
| 10 | 16.47 | 33.87 | | 317 | 10 | 16.47 | 33.87 | | 24.79 | 317 | 0.03 |
| 24 | - | 33.87 | | | 20 | 16.3 | 33.87 | | 24.83 | 313 | 0.06 |
| 54 | - | 33.86 | | | 30 | 16.2 | 33.87 | | 24.85 | 311 | 0.09 |
| 78 | - | 33.80 | | | 50 | 15.8 | 33.86 | | 24.94 | 303 | 0.16 |
| 106 | 13.32 | 33.65 | | 268 | 75 | 15.4 | 33.81 | | 24.99 | 298 | 0.23 |
| 157 | 10.84 | 33.93 | | 202 | 100 | 13.4 | 33.66 | | 25.30 | 269 | 0.30 |
| 207 | 9.50 | 34.14 | | 165 | 150 | 11.20 | 33.89 | | 25.90 | 211 | 0.42 |
| 306 | 8.92 | 34.34 | | 141 | 200 | 9.57 | 34.11 | | 26.35 | 168 | 0.52 |
| 412 | 7.86 | 34.40 | | 121 | 250 | 9.31 | 34.25 | | 26.50 | 154 | 0.60 |
| 512 | 6.89 | 34.41 | | 108 | 300 | 8.99 | 34.33 | | 26.62 | 143 | 0.68 |
| 613 | 6.02 | 34.45 | | 94 | 400 | 7.98 | 34.40 | | 26.83 | 123 | 0.82 |
| 810 | 4.78 | 34.45 | | 80 | 500 | 6.99 | 34.41 | | 26.98 | 109 | 0.94 |
| 1012 | 4.12 | 34.54 | | 66 | 600 | 6.12 | 34.45 | | 27.12 | 95 | 1.05 |
| 1213 | 3.51 | 34.56 | | 59 | 700 | 5.39 | 34.46 | | 27.22 | 86 | 1.15 |
| | | | | | 800 | 4.83 | 34.45 | | 27.28 | 80 | 1.24 |
| | | | | | 1000 | 4.16 | 34.54 | | 27.43 | 66 | 1.41 |
| 133.25 | CREST; March 9, 1952; 0301 GCT; 26°04.5'N, 112°48'W; sounding, 40 fm; wind, 240°, force 4; weather, overcast; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 18.02 | 34.47 | 5.59 | 308 | 0 | 18.02 | 34.47 | 5.59 | 24.88 | 308 | 0.00 |
| 10 | 17.78 | 34.45 | 5.46 | 304 | 10 | 17.78 | 34.45 | 5.46 | 24.92 | 304 | 0.03 |
| 20 | 17.62 | 34.51 | 5.06 | 296 | 20 | 17.62 | 34.51 | 5.06 | 25.01 | 296 | 0.06 |
| 30 | 17.30 | 34.36 | 4.31 | 299 | 30 | 17.30 | 34.36 | 4.31 | 24.97 | 299 | 0.09 |
| 50 | 16.12 | 34.22 | 2.74 | 283 | 50 | 16.12 | 34.22 | 2.74 | 25.14 | 283 | 0.15 |
| 133.25 | BLACK DOUGLAS; March 26, 1952; 0945 GCT; 26°04.5'N, 112°48'W; sounding, 45 fm; wind, 310°, force 1; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 15.25 | 33.91 | | 287 | 0 | 15.25 | 33.91 | | 25.10 | 287 | 0.00 |
| 10 | 15.26 | 33.87 | | 291 | 10 | 15.26 | 33.87 | | 25.06 | 291 | 0.03 |
| 20 | 15.27 | 33.89 | | 289 | 20 | 15.27 | 33.89 | | 25.08 | 289 | 0.06 |
| 30 | 14.88 | 33.95 | | 277 | 30 | 14.88 | 33.95 | | 25.21 | 277 | 0.09 |
| 50 | 14.44 | 33.86 | | 274 | 50 | 14.44 | 33.86 | | 25.23 | 274 | 0.14 |
| 133.30 | CREST; March 9, 1952; 0034 GCT; 25°54'N, 113°05'W; sounding, 95 fm; wind, 240°, force 3; weather, overcast; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | 17.92 | 34.47 | 5.13 | 306 | 0 | 17.92 | 34.47 | 5.13 | 24.91 | 306 | 0.00 |
| 10 | 17.78 | 34.47 | 5.04 | 302 | 10 | 17.78 | 34.47 | 5.04 | 24.94 | 302 | 0.03 |
| 20 | 17.74 | 34.45 | 5.02 | 303 | 20 | 17.74 | 34.45 | 5.02 | 24.93 | 303 | 0.06 |
| 30 | 17.74 | 34.51 | 4.97 | 299 | 30 | 17.74 | 34.51 | 4.97 | 24.98 | 299 | 0.09 |
| 50 | 17.34 | 34.40 | 4.53 | 297 | 50 | 17.34 | 34.40 | 4.53 | 24.99 | 297 | 0.15 |
| 92 75 | 14.17 | 34.20 | 2.00 | 244 | 75 | 14.17 | 34.20 | 2.00 | 25.55 | 244 | 0.22 |
| 100 | 13.18 | 34.38 | 0.84 | 211 | 100 | 13.18 | 34.38 | 0.84 | 25.90 | 211 | 0.28 |
| 125 | 12.92 | 34.51 | 0.50 | 197 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; March 26, 1952; 0625 GCT; 25°54.5'N, 113°07.5'W; sounding, 110 fm; wind, 280°, force 1; weather, clear; sea, slight; wire angle, 17°. | | | | | | | | | | | 133.30 |
| 0 | 15.67 | 33.93 | | 295 | 0 | 15.67 | 33.93 | | 25.02 | 295 | 0.00 |
| 9 | 15.54 | 33.93 | | 292 | 10 | 15.54 | 33.93 | | 25.05 | 292 | 0.03 |
| 24 | 15.55 | 33.98 | | 289 | 20 | 15.54 | 33.97 | | 25.08 | 289 | 0.06 |
| 48 | 14.44 | 33.89 | | 272 | 30 | 15.53 | 33.97 | | 25.08 | 289 | 0.09 |
| 71 | 13.62 | 33.89 | | 256 | 50 | 14.40 | 33.89 | | 25.27 | 271 | 0.14 |
| 96 | 12.64 | 34.16 | | 217 | 75 | 13.40 | 33.90 | | 25.48 | 251 | 0.21 |
| 120 | 12.28 | 34.33 | | 198 | 100 | 12.58 | 34.23 | | 25.90 | 211 | 0.27 |
| 149 | 11.93 | 34.38 | | 188 | 150 | (11.92) | (34.38) | | (26.14) | (188) | (0.37) |
| CREST; March 8, 1952; 1939 GCT; 25°34.5'N, 113°45.5'W; sounding, 1700 fm; wind, 250°, force 3; weather, overcast; sea, rough; wire angle, 05°. . | | | | | | | | | | | 133.40 |
| 0 | - | 34.51 | 5.18 | | 0 | 18.8 | 34.51 | 5.18 | 24.72 | 324 | 0.00 |
| 10 | 18.60 | 34.52 | 5.18 | 318 | 10 | 18.60 | 34.52 | 5.18 | 24.77 | 318 | 0.03 |
| 25 | - | 34.51 | 5.12 | | 20 | 18.5 | 34.51 | 5.14 | 24.79 | 316 | 0.06 |
| 50 | - | 34.52 | 5.13 | | 30 | 18.5 | 34.51 | 5.13 | 24.79 | 316 | 0.10 |
| 75 | - | 34.07 | 2.84 | | 50 | 18.5 | 34.52 | 5.13 | 24.80 | 316 | 0.16 |
| 99 | 12.97 | 34.13 | 2.01 | 226 | 75 | 14.2 | 34.07 | 2.84 | 25.45 | 254 | 0.23 |
| 150 | 11.64 | 34.47 | 0.93 | 176 | 100 | 12.90 | 34.14 | 1.98 | 25.77 | 224 | 0.29 |
| 244 | 10.24 | 34.60 | 0.41 | 143 | 150 | 11.64 | 34.47 | 0.93 | 26.26 | 176 | 0.39 |
| 291 | 9.72 | 34.56 | 0.30 | 137 | 200 | 10.85 | 34.58 | 0.58 | 26.49 | 155 | 0.48 |
| 389 | 8.60 | 34.51 | 0.24 | 124 | 250 | 10.18 | 34.60 | 0.39 | 26.63 | 142 | 0.55 |
| 483 | 7.24 | - | 0.16 | | 300 | 9.63 | 34.55 | 0.29 | 26.68 | 137 | 0.63 |
| 582 | 6.34 | 34.45 | 0.17 | 98 | 400 | 8.43 | 34.51 | 0.23 | 26.84 | 121 | 0.76 |
| 774 | 5.11 | 34.49 | 0.26 | 80 | 500 | 7.07 | 34.47 | 0.16 | 27.01 | 105 | 0.88 |
| 966 | 4.30 | 34.61u | 0.42 | | 600 | 6.21 | 34.45 | 0.17 | 27.11 | 96 | 0.99 |
| 1166 | 3.74 | 34.54 | 0.59 | 62 | 700 | 5.56 | 34.46 | 0.22 | 27.20 | 87 | 1.09 |
| | | | | | 800 | 4.97 | (34.50) | 0.29 | (27.30) | (78) | (1.18) |
| | | | | | 1000 | 4.20 | (34.54) | 0.46 | (27.42) | (67) | (1.35) |
| BLACK DOUGLAS; March 26, 1952; 0053 GCT; 25°34.5'N, 113°45.5'W; sounding, 1680 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 06°. | | | | | | | | | | | 133.40 |
| 0 | - | 34.16 | | | 0 | 16.9 | 34.16 | | 24.91 | 305 | 0.00 |
| 10 | 16.84 | 34.14 | | 305 | 10 | 16.84 | 34.14 | | 24.91 | 305 | 0.03 |
| 25 | - | 34.13 | | | 20 | 16.5 | 34.13 | | 24.98 | 298 | 0.06 |
| 50 | - | 34.16 | | | 30 | 16.5 | 34.13 | | 24.98 | 298 | 0.09 |
| 74 | - | 34.13 | | | 50 | 16.5 | 34.16 | | 25.01 | 296 | 0.15 |
| 98 | 13.61 | 34.16 | | 236 | 75 | 16.3 | 34.13 | | 25.03 | 294 | 0.22 |
| 149 | 11.71 | 34.52 | | 174 | 100 | 13.30 | 34.16 | | 25.70 | 230 | 0.29 |
| 195 | 11.22 | 34.60 | | 159 | 150 | 11.70 | 34.52 | | 26.29 | 174 | 0.39 |
| 240 | 10.26 | 34.56 | | 146 | 200 | 11.13 | 34.60 | | 26.46 | 158 | 0.48 |
| 287 | 9.65 | 34.54 | | 138 | 250 | 10.11 | 34.55 | | 26.60 | 144 | 0.56 |
| 385 | 8.40 | 34.52 | | 120 | 300 | 9.49 | 34.54 | | 26.70 | 135 | 0.63 |
| 479 | 7.25 | 34.45 | | 109 | 400 | 8.22 | 34.51 | | 26.88 | 118 | 0.76 |
| 581 | 6.40 | 34.49 | | 95 | 500 | 7.04 | 34.45 | | 27.00 | 107 | 0.88 |
| | | | | | 600 | (6.28) | (34.50) | | (27.14) | (93) | (0.99) |

SIO

CCOFI 5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 133.50 | CREST; March 8, 1952; 1504 GCT; 25°14.5'N, 114°24'W; sounding, 1800 fm; wind, 310°, force 3; weather, overcast; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | - | 34.23 | 5.27 | | 0 | 17.8 | 34.23 | 5.27 | 24.75 | 320 | 0.00 |
| 10 | 17.78 | 34.22 | 5.26 | 321 | 10 | 17.78 | 34.22 | 5.26 | 24.75 | 321 | 0.03 |
| 25 | - | 34.23 | 5.25 | | 20 | 17.8 | 34.23 | 5.25 | 24.75 | 320 | 0.06 |
| 50 | - | 34.25 | 5.25 | | 30 | 17.8 | 34.23 | 5.25 | 24.75 | 320 | 0.10 |
| 74 | - | 33.98 | 4.62 | | 50 | 17.7 | 34.25 | 5.25 | 24.79 | 317 | 0.16 |
| 99 | 12.29 | 33.67 | 3.87 | 247 | 75 | 16.1 | 33.98 | 4.61 | 24.96 | 300 | 0.24 |
| 150 | 10.73 | 34.05 | 2.18 | 192 | 100 | 12.20 | 33.67 | 3.82 | 25.54 | 245 | 0.31 |
| 241 | 9.88 | 34.42 | 0.82 | 150 | 150 | 10.73 | 34.05 | 2.18 | 26.10 | 192 | 0.42 |
| 287 | 9.32 | 34.40 | 0.59 | 143 | 200 | 10.27 | 34.37 | 1.26 | 26.43 | 160 | 0.51 |
| 384 | 8.10 | 34.42 | 0.33 | 123 | 250 | 9.77 | 34.41 | 0.78 | 26.55 | 149 | 0.59 |
| 476 | 7.11 | 34.42 | 0.20 | 110 | 300 | 9.15 | 34.40 | 0.54 | 26.64 | 140 | 0.66 |
| 574 | 6.20 | 34.40 | 0.22 | 100 | 400 | 7.93 | 34.42 | 0.29 | 26.85 | 121 | 0.80 |
| 765 | 5.03 | 34.45 | 0.28 | 82 | 500 | 6.88 | 34.41 | 0.20 | 26.99 | 107 | 0.92 |
| 954 | 4.28 | 34.47 | 0.45 | 73 | 600 | 6.01 | 34.40 | 0.23 | 27.10 | 97 | 1.03 |
| 1155 | 3.58 | 34.54 | 0.65 | 61 | 700 | 5.37 | 34.43 | 0.25 | 27.20 | 88 | 1.13 |
| | | | | | 800 | 4.88 | 34.45 | 0.30 | 27.27 | 81 | 1.22 |
| | | | | | 1000 | 4.12 | 34.48 | 0.49 | 27.38 | 70 | 1.39 |
| 133.50 | BLACK DOUGLAS; March 25, 1952; 1902 GCT; 25°13'N, 114°21'W; sounding, 2020 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | - | 33.98 | | | 0 | 17.4 | 33.98 | | 24.66 | 329 | 0.00 |
| 10 | 16.57 | 33.98 | | 311 | 10 | 16.57 | 33.98 | | 24.85 | 311 | 0.03 |
| 24 | - | 33.98 | | | 20 | 16.6 | 33.98 | | 24.85 | 311 | 0.06 |
| 53 | - | 34.04 | | | 30 | 16.6 | 33.98 | | 24.85 | 311 | 0.09 |
| 77 | - | 33.69 | | | 50 | 16.6 | 34.04 | | 24.89 | 307 | 0.16 |
| 105 | 12.69 | 33.98 | | 232 | 75 | 14.3 | 33.70 | | 25.14 | 283 | 0.23 |
| 154 | 11.00 | 34.22 | | 184 | 100 | 12.8 | 33.92 | | 25.62 | 238 | 0.30 |
| 202 | 10.54 | 34.43 | | 160 | 150 | 11.10 | 34.20 | | 26.15 | 187 | 0.40 |
| 256 | 10.74 | 34.65 | | 148 | 200 | 10.56 | 34.43 | | 26.43 | 161 | 0.49 |
| 301 | 9.82 | 34.58 | | 138 | 250 | 10.74 | 34.64 | | 26.56 | 148 | 0.57 |
| 407 | 8.03 | 34.49 | | 117 | 300 | 9.85 | 34.58 | | 26.67 | 138 | 0.65 |
| 510 | 7.04 | 34.46 | | 106 | 400 | 8.11 | 34.49 | | 26.88 | 118 | 0.78 |
| 616 | 6.31 | 34.45 | | 97 | 500 | 7.13 | 34.46 | | 27.00 | 107 | 0.90 |
| | | | | | 600 | 6.42 | 34.45 | | 27.09 | 99 | 1.01 |
| 133.60 | BLACK DOUGLAS; March 25, 1952; 1301 GCT; 24°54.5'N, 115°01.5'W; sounding, 2160 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | - | 33.95 | | | 0 | 16.7 | 33.95 | | 24.80 | 316 | 0.00 |
| 10 | 16.76 | 33.93 | | 319 | 10 | 16.76 | 33.93 | | 24.77 | 319 | 0.03 |
| 25 | - | 33.95 | | | 20 | 16.8 | 33.94 | | 24.77 | 319 | 0.06 |
| 53 | - | 34.02 | | | 30 | 16.8 | 33.96 | | 24.78 | 317 | 0.10 |
| 77 | - | 33.87 | | | 50 | 16.8 | 34.02 | | 24.83 | 313 | 0.16 |
| 104 | 12.94 | 33.71 | | 256 | 75 | 16.3 | 33.89 | | 24.85 | 311 | 0.24 |
| 153 | 10.84 | 33.91 | | 204 | 100 | 13.0 | 33.72 | | 25.42 | 257 | 0.31 |
| 201 | 10.10 | 34.23 | | 168 | 150 | 10.92 | 33.88 | | 25.94 | 207 | 0.43 |
| 254 | 9.58 | 34.42 | | 146 | 200 | 10.12 | 34.22 | | 26.34 | 169 | 0.52 |
| 299 | 9.27 | 34.45 | | 139 | 250 | 9.62 | 34.41 | | 26.58 | 147 | 0.60 |
| 404 | 8.30 | 34.49 | | 121 | 300 | 9.26 | 34.45 | | 26.67 | 138 | 0.68 |
| 507 | 7.21 | 34.52 | | 104 | 400 | 8.37 | 34.49 | | 26.84 | 122 | 0.81 |
| 615 | 6.25 | 34.47 | | 95 | 500 | 7.29 | 34.52 | | 27.02 | 105 | 0.94 |
| | | | | | 600 | 6.38 | 34.47 | | 27.11 | 97 | 1.04 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| CREST; March 7, 1952; 1956 GCT; 25°33'N, 112°20'W; sounding, 45 fm; wind, 320°, force 3; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 137.23 |
| 0 | 19.03 | 34.49 | 4.97 | 331 | 0 | 19.03 | 34.49 | 4.97 | 24.64 | 331 | 0.00 |
| 10 | 18.94 | 34.49 | 4.99 | 328 | 10 | 18.94 | 34.49 | 4.99 | 24.67 | 328 | 0.03 |
| 20 | 18.91 | 34.49 | 5.07 | 328 | 20 | 18.91 | 34.49 | 5.07 | 24.67 | 328 | 0.07 |
| 30 | 18.92 | 34.49 | 5.09 | 328 | 30 | 18.92 | 34.49 | 5.09 | 24.67 | 328 | 0.10 |
| 50 | 18.12 | 34.47 | 4.44 | 310 | 50 | 18.12 | 34.47 | 4.44 | 24.86 | 310 | 0.16 |
| BLACK DOUGLAS; March 24, 1952; 0601 GCT; 25°34'N, 112°18.5'W; sounding, 40 fm; wind, 040°, force 2; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | | 137.23 |
| 0 | 16.13 | 34.09 | | 293 | 0 | 16.13 | 34.09 | | 25.04 | 293 | 0.00 |
| 10 | 16.12 | 34.09 | | 293 | 10 | 16.12 | 34.09 | | 25.04 | 293 | 0.03 |
| 20 | 16.12 | 34.07 | | 294 | 20 | 16.12 | 34.07 | | 25.02 | 294 | 0.06 |
| 30 | 16.09 | 34.16 | | 287 | 30 | 16.09 | 34.16 | | 25.10 | 287 | 0.09 |
| 50 | 15.88 | 34.07 | | 289 | 50 | 15.88 | 34.07 | | 25.08 | 289 | 0.15 |
| CREST; March 7, 1952; 2255 GCT; 25°20'N, 112°45'W; sounding, 195 fm; wind, 330°, force 3; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | | 137.30 |
| 0 | 18.77 | 34.45 | 5.12 | 327 | 0 | 18.77 | 34.45 | 5.12 | 24.68 | 327 | 0.00 |
| 10 | 18.63 | 34.47 | 5.25 | 322 | 10 | 18.63 | 34.47 | 5.25 | 24.73 | 322 | 0.03 |
| 25 | 18.62 | 34.47 | 5.25 | 322 | 20 | 18.62 | 34.47 | 5.25 | 24.73 | 322 | 0.06 |
| 50 | 18.33 | 34.47 | 4.94 | 315 | 30 | 18.62 | 34.47 | 5.23 | 24.73 | 322 | 0.10 |
| 74 | 14.18 | 34.20 | 2.03 | 244 | 50 | 18.33 | 34.47 | 4.94 | 24.80 | 315 | 0.16 |
| 98 | 12.96 | 34.27 | 1.24 | 215 | 75 | 14.11 | 34.20 | 2.00 | 25.57 | 243 | 0.23 |
| 149 | 12.10 | 34.60 | 0.26 | 175 | 100 | 12.90 | 34.28 | 1.17 | 25.87 | 213 | 0.29 |
| 197 | 11.48 | 34.65 | 0.10 | 160 | 150 | 12.10 | 34.60 | 0.24 | 26.28 | 175 | 0.39 |
| 246 | 11.13 | 34.65 | 0.16 | 154 | 200 | 11.43 | 34.65 | 0.10 | 26.44 | 159 | 0.47 |
| 296 | 10.75 | - | 0.16 | | 250 | 11.09 | (34.65) | 0.16 | (26.51) | (154) | (0.55) |
| | | | | | 300 | (10.71) | | (0.16) | | | |
| BLACK DOUGLAS; March 24, 1952; 1926 GCT; 25°00'N, 113°23.5'W; sounding, 1300 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 25°. | | | | | | | | | | | 137.40 |
| 0 | - | 34.05 | | | 0 | 16.2 | 34.05 | | 24.99 | 297 | 0.00 |
| 9 | 16.18 | 33.98 | | 302 | 10 | 16.2 | 33.98 | | 24.94 | 303 | 0.03 |
| 23 | - | 34.05 | | | 20 | 16.1 | 34.03 | | 25.00 | 297 | 0.06 |
| 49 | - | 34.05 | | | 30 | 16.1 | 34.07 | | 25.03 | 294 | 0.09 |
| 70 | - | 33.98 | | | 50 | 16.1 | 34.05 | | 25.01 | 295 | 0.15 |
| 96 | 12.16 | 34.00 | | 220 | 75 | 16.1 | 33.98 | | 24.96 | 300 | 0.22 |
| | | | | | 100 | 12.1 | (34.01) | | (25.82) | (219) | (0.29) |
| CREST; March 8, 1952; 0943 GCT; 24°40'N, 114°02'W; sounding, 1850 fm; wind, 280°, force 2; weather, cloudy; sea, slight; wire angle, 04°. | | | | | | | | | | | 137.50 |
| 0 | - | 34.43 | 5.22 | | 0 | 18.3 | 34.43 | 5.22 | 24.78 | 318 | 0.00 |
| 10 | 18.32 | 34.43 | 5.12 | 318 | 10 | 18.32 | 34.43 | 5.12 | 24.78 | 318 | 0.03 |
| 25 | - | 34.43 | 5.12 | | 20 | 18.3 | 34.43 | 5.12 | 24.78 | 318 | 0.06 |
| 50 | - | 34.43 | 5.14 | | 30 | 18.3 | 34.43 | 5.12 | 24.78 | 318 | 0.10 |
| 74 | - | 34.42 | 5.10 | | 50 | 18.3 | 34.43 | 5.14 | 24.78 | 318 | 0.16 |
| 98 | 14.16u | 33.91 | 3.10 | | 75 | 16.2 | 34.42 | 5.08 | 25.27 | 271 | 0.23 |
| 198 | 10.56 | 34.40 | 1.04 | 163 | 100 | 13.3 | 33.91 | 2.82 | 25.51 | 248 | 0.30 |
| 246 | 9.98 | 34.42 | 0.64 | 152 | 150 | 11.6 | 34.34 | 1.67 | 26.17 | 185 | 0.41 |
| 293 | 9.34 | 34.51 | 0.43 | 135 | 200 | 10.53 | 34.40 | 1.02 | 26.41 | 162 | 0.50 |
| 393 | 8.35 | 34.51 | 0.28 | 120 | 250 | 9.93 | 34.43 | 0.63 | 26.54 | 150 | 0.58 |
| 489 | 6.96 | 34.43 | 0.24 | 107 | 300 | 9.26 | 34.51 | 0.41 | 26.71 | 134 | 0.65 |
| 589 | 6.30 | 34.43 | 0.18 | 99 | 400 | 8.24 | 34.51 | 0.27 | 26.87 | 119 | 0.78 |
| 785 | 5.02 | 34.45 | 0.22 | 82 | 500 | 6.88 | 34.43 | 0.24 | 27.01 | 106 | 0.90 |
| 978 | 4.40 | 34.52 | 0.39 | 70 | 600 | 6.22 | 34.43 | 0.18 | 27.10 | 98 | 1.01 |
| 1181 | 3.73 | 34.51 | 0.59 | 64 | 700 | 5.51 | 34.43 | 0.19 | 27.18 | 89 | 1.12 |
| | | | | | 800 | 4.95 | 34.46 | 0.23 | 27.27 | 81 | 1.21 |
| | | | | | 1000 | 4.33 | 34.52 | 0.41 | 27.39 | 70 | 1.38 |

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5203

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

137.50 BLACK DOUGLAS; March 25, 1952; 0133 GCT; 24°40'N, 114°01.5'W; sounding, 2200 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 19°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.36 | | 0 | 17.9 | 34.36 | 24.83 | 313 | 0.00 |
| 9 | 17.90 | 34.29 | 318 | 10 | 17.9 | 34.29 | 24.77 | 318 | 0.03 |
| 23 | - | 34.29 | | 20 | 17.9 | 34.29 | 24.77 | 318 | 0.06 |
| 52 | - | 34.34 | | 30 | 17.8 | 34.30 | 24.80 | 315 | 0.10 |
| 75 | - | 34.38 | | 50 | 17.7 | 34.34 | 24.86 | 310 | 0.16 |
| 102 | 14.56 | 33.86 | 277 | 75 | 17.7 | 34.38 | 24.89 | 307 | 0.24 |
| 148 | 11.75 | 34.25 | 195 | 100 | 14.9 | 33.86 | 25.14 | 284 | 0.31 |
| 194 | 10.98 | 34.51 | 162 | 150 | 11.73 | 34.27 | 26.09 | 193 | 0.43 |
| 245 | 10.46 | 34.54 | 151 | 200 | 10.94 | 34.51 | 26.42 | 161 | 0.52 |
| 289 | 9.70 | 34.54 | 139 | 250 | 10.40 | 34.54 | 26.54 | 150 | 0.60 |
| 390 | 8.51 | 34.53 | 121 | 300 | 9.55 | 34.54 | 26.69 | 136 | 0.68 |
| 490 | 7.32 | 34.45 | 110 | 400 | 8.40 | 34.52 | 26.86 | 120 | 0.81 |
| 595 | 6.31 | 34.47 | 96 | 500 | 7.22 | 34.45 | 26.98 | 109 | 0.93 |
| | | | | 600 | (6.26) | (34.47) | (27.12) | (95) | (1.04) |

137.60 BLACK DOUGLAS; March 25, 1952; 0704 GCT; 24°20'N, 114°39.5'W; sounding, 2080 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 05°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 34.17 | | 0 | 17.8 | 34.17 | 24.71 | 325 | 0.00 |
| 10 | 17.94 | 34.18 | 327 | 10 | 17.94 | 34.18 | 24.68 | 327 | 0.03 |
| 25 | - | 34.18 | | 20 | 17.9 | 34.18 | 24.69 | 326 | 0.07 |
| 55 | - | 34.16 | | 30 | 17.9 | 34.18 | 24.69 | 326 | 0.10 |
| 79 | - | 34.18 | | 50 | 17.9 | 34.16 | 24.67 | 328 | 0.16 |
| 108 | 12.76 | 33.73 | 251 | 75 | 17.9 | 34.18 | 24.69 | 326 | 0.25 |
| 159 | 11.88 | 34.20 | 201 | 100 | 13.6 | 33.75 | 25.32 | 266 | 0.32 |
| 209 | 10.31 | 34.31 | 165 | 150 | 12.12 | 34.16 | 25.93 | 208 | 0.44 |
| 265 | 9.52 | 34.39 | 147 | 200 | 10.50 | 34.29 | 26.33 | 170 | 0.54 |
| 313 | 9.21 | 34.43 | 139 | 250 | 9.70 | 34.37 | 26.53 | 151 | 0.62 |
| 421 | 7.79 | 34.45 | 117 | 300 | 9.29 | 34.42 | 26.64 | 141 | 0.70 |
| 527 | 6.88 | 34.45 | 104 | 400 | 8.03 | 34.45 | 26.86 | 120 | 0.83 |
| 636 | 6.18 | 34.45 | 96 | 500 | 7.09 | 34.45 | 26.99 | 107 | 0.95 |
| | | | | 600 | 6.40 | 34.45 | 27.09 | 98 | 1.06 |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

E. W. SCRIPPS; March 24, 1952; 0010 GCT; 34°50'N, 120°55'W; sounding, 141 fm; wind, 270°, force 4; weather, cloudy; sea, moderate; wire angle, 10°. a)

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.42 | 0 | 11.3 | 6.42 |
| 9 | 11.21 | 6.38 | 10 | 11.20 | 6.37 |
| 29 | 10.80 | 5.67 | 20 | 10.96 | 5.98 |
| 58 | 10.43 | 4.92 | 30 | 10.78 | 5.66 |
| 88 | 9.57 | 3.32 | 50 | 10.56 | 5.18 |
| 118 | 9.32 | 2.87 | 75 | 9.83 | 3.76 |
| 157 | 8.96 | 2.13 | 100 | 9.47 | 3.15 |
| 216 | 8.00 | 1.56 | 150 | 9.04 | 2.27 |
| | | | 200 | 8.21 | 1.66 |

E. W. SCRIPPS; March 24, 1952; 0235 GCT; 34°45'N, 121°06'W; sounding, 300 fm; wind, 280°, force 5; weather, cloudy; sea, rough; wire angle, 34°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.68 | 0 | 11.9 | 6.68 |
| 7 | 11.90 | 6.72 | 10 | 11.9 | 6.72 |
| 21 | - | 6.38 | 20 | 11.7 | 6.41 |
| 42 | - | 5.91 | 30 | 11.4 | 6.21 |
| 62 | 9.85 | 4.36 | 50 | 11.3 | 4.98 |
| 82 | - | 3.96 | 75 | 9.4 | 4.11 |
| 127 | - | 2.98 | 100 | 8.7 | 3.51 |
| 167 | 8.00 | 2.61 | 150 | 8.1 | 2.75 |
| 209 | 7.69 | 2.35 | 200 | 7.7 | 2.41 |

E.W. SCRIPPS; March 24, 1952; 0439 GCT; 34°39.5'N, 121°16.5'W; sounding, 420 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 24°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.40 | 0 | 12.0 | 6.40 |
| 9 | 12.00 | 6.39 | 10 | 12.0 | 6.39 |
| 23 | - | 6.34 | 20 | 12.0 | 6.35 |
| 46 | - | 6.19 | 30 | 12.0 | 6.30 |
| 69 | - | 4.35 | 50 | 11.9 | 6.11 |
| 91 | 9.05 | 3.42 | 75 | 10.0 | 4.08 |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

E. W. SCRIPPS; March 26, 1952; 1900 GCT; 34°50'N, 120°55.5'W; sounding, 140 fm; wind, 210°, force 1; weather, overcast; sea, rough; wire angle, 12°. 77⁶.52⁵ 77⁶.52⁵

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | - | 0 | 12.3 | |
| 10 | 11.79 | - | 10 | 11.79 | |
| 24 | - | 6.49 | 20 | 11.4 | |
| 49 | - | 4.98 | 30 | 11.2 | 6.22 |
| 73 | 9.90 | 3.41 | 50 | 10.5 | 4.87 |
| 98 | 9.54 | 3.08 | 75 | 9.87 | 3.38 |
| 151 | 8.62 | 2.36 | 100 | 9.51 | 3.04 |
| 200 | 8.22 | 1.75 | 150 | 8.64 | 2.38 |
| | | | 200 | 8.22 | 1.75 |

E. W. SCRIPPS; March 26, 1952; 2119 GCT; 34°44'N, 121°08'W; sounding, 300 fm; wind, 270°, force 1; weather, overcast; sea, rough; wire angle, 00°. 77⁶.55 77⁶.55

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.74 | 0 | 12.6 | 6.74 |
| 10 | 11.70 | 6.73 | 10 | 11.70 | 6.73 |
| 25 | - | 5.92 | 20 | 11.6 | 6.31 |
| 50 | - | 4.39 | 30 | 11.2 | 5.49 |
| 75 | 9.27 | 3.88 | 50 | 10.4 | 4.39 |
| 100 | - | 3.56 | 75 | 9.27 | 3.88 |
| 154 | - | 2.72 | 100 | 9.0 | 3.56 |
| 203 | 7.56 | 2.36 | 150 | 8.2 | 2.78 |
| 252 | 7.25 | 1.72 | 200 | 7.58 | 2.39 |
| 301 | 6.94 | 1.50 | 250 | 7.39 | 1.74 |
| 404 | 6.38 | 0.77 | 300 | 6.95 | 1.52 |
| 504 | 5.76 | 0.48 | 400 | 6.42 | 0.81 |
| | | | 500 | 5.79 | 0.49 |

E. W. SCRIPPS; March 26, 1952; 2313, 2335 GCT; 34°39'N, 121°17.5'W; sounding, 400 fm; wind, 270°, force 1; weather, overcast; sea, rough; wire angle, 15°, 12°. 77⁶.57⁵ 77⁶.57⁵

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.45 | 0 | 12.3 | 6.45 |
| 10 | 12.00 | 6.49 | 10 | 12.00 | 6.49 |
| 24 | - | 6.52 | 20 | 11.8 | 6.53 |
| 48 | - | 6.04 | 30 | 11.7 | 6.51 |
| 72 | - | 5.55 | 50 | 11.4 | 6.02 |
| 96 | 9.51 | 3.86 | 75 | 10.7 | 5.19 |
| 147 | - | 2.84 | 100 | 8.9 | 3.75 |
| 195 | - | 2.42 | 150 | 8.2 | 2.82 |
| 242 | 7.34 | 1.84 | 200 | 7.7 | 2.34 |
| | | | 250 | 7.31 | 1.80 |
| 292 | 7.08 | 1.59 | 300 | 6.99 | 1.54 |
| 389 | 6.00 | 1.02 | 400 | 5.97 | 0.98 |
| 481 | 5.72 | 0.67 | 500 | 5.68 | 0.61 |
| 580 | 5.46 | 0.40 | | | |

a) Forty-one hydrographic stations were occupied by RV E. W. Scripps from 22 to 29 March to collect data for a special upwelling study. Many of the stations were occupied twice, and nine observations were made at Station 77⁸.55⁸ at three-hourly intervals.

S10

CCOFI 5203

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

$77^{6}.60$

E. W. SCRIPPS; March 24, 1952; 0815 GCT; 34°34.5'N, 121°27'W; sounding, 925 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 35°.

$77^{6}.60$

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.20 | 0 | 11.8 | 6.20 |
| 8 | 11.79 | 6.20 | 10 | 11.8 | 6.20 |
| 21 | - | 6.14 | 20 | 11.8 | 6.15 |
| 45 | - | 6.19 | 30 | 11.7 | 6.16 |
| 66 | - | 6.11 | 50 | 11.7 | 6.19 |
| 90 | 9.64 | 4.26 | 75 | 11.1 | 5.63 |
| 131 | - | 2.92 | 100 | 9.4 | 3.83 |
| 175 | - | 2.34 | 150 | 8.3 | 2.58 |
| 224 | 7.58 | 1.98 | 200 | 7.9 | 2.14 |

E. W. SCRIPPS; March 27, 1952; 0131 GCT; 34°35'N, 121°27'W; sounding, 910 fm; wind, 250°, force 1; weather, cloudy; sea, very rough; wire angle, 00°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.28 | 0 | 12.3 | 6.28 |
| 10 | 11.93 | 6.30 | 10 | 11.93 | 6.30 |
| 25 | - | 6.25 | 20 | 11.8 | 6.30 |
| 50 | - | 5.85 | 30 | 11.8 | 6.23 |
| 75 | - | 4.43 | 50 | 11.7 | 5.85 |
| 100 | 9.28 | 3.80 | 75 | 9.7 | 4.43 |
| 154 | - | 3.10 | 100 | 9.18 | 3.80 |
| 203 | - | 2.57 | 150 | 8.5 | 3.15 |
| 252 | 7.30 | 2.16 | 200 | 7.9 | 2.62 |
| 302 | 6.79 | 1.65 | 250 | 7.32 | 2.18 |
| 406 | 6.27 | 0.96 | 300 | 6.81 | 1.68 |
| 505 | 5.63 | 0.53 | 400 | 6.32 | 0.99 |
| 611 | 5.04 | 0.32 | 500 | 5.68 | 0.56 |
| | | | 600 | 5.10 | 0.34 |

$77^{6}.62^{5}$

E. W. SCRIPPS; March 24, 1952; 1053 GCT; 34°29.5'N, 121°38'W; sounding, 1925 fm; wind, 320°, force 5; weather, missing; sea, rough; wire angle, 27°.

$77^{6}.62^{5}$

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.18 | 0 | 11.8 | 6.18 |
| 9 | 11.71 | 6.17 | 10 | 11.7 | 6.17 |
| 23 | - | 6.17 | 20 | 11.7 | 6.17 |
| 49 | - | 6.14 | 30 | 11.7 | 6.17 |
| 72 | - | 6.14 | 50 | 11.7 | 6.14 |
| 98 | 9.34 | 4.61 | 75 | 11.7 | 6.12 |
| 147 | - | 3.10 | 100 | 9.3 | 4.49 |
| 197 | - | 2.70 | 150 | 8.8 | 3.08 |
| 251 | 7.44 | 2.10 | 200 | 8.2 | 2.67 |
| | | | 250 | 7.5 | 2.13 |

E. W. SCRIPPS; March 27, 1952; 0358 GCT; 34°29.5'N, 121°38.5'W; sounding, 1900 fm; wind, calm; weather, overcast; sea, rough; wire angle, 03°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.31 | 0 | 13.0 | 6.31 |
| 10 | 12.03 | 6.32 | 10 | 12.03 | 6.32 |
| 25 | - | 6.21 | 20 | 12.0 | 6.26 |
| 50 | - | 6.06 | 30 | 11.9 | 6.19 |
| 75 | - | 4.78 | 50 | 11.8 | 6.06 |
| 100 | 9.44 | 4.07 | 75 | 10.0 | 4.78 |
| 153 | - | 3.07 | 100 | 9.44 | 4.07 |
| 200 | - | 2.71 | 150 | 8.6 | 3.09 |
| 246 | 7.40 | 2.06 | 200 | 7.9 | 2.71 |

$77^{8}55^{8}$ K1

E. W. SCRIPPS; March 28, 1952; 1730 GCT; 34°30'N, 121°00'W; sounding, 635 fm; wind, 340°, force 4; weather, fog; sea, slight; wire angle, 21°.

$77^{8}55^{8}$ K2

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.40 | 0 | 12.6 | 6.40 |
| 9 | 12.50 | 6.43 | 10 | 12.5 | 6.43 |
| 23 | - | 6.14 | 20 | 12.1 | 6.32 |
| 47 | - | 4.76 | 30 | 12.0 | 5.85 |
| 70 | - | 3.96 | 50 | 10.0 | 4.55 |
| 93 | 9.04 | 3.73 | 75 | 9.6 | 3.93 |
| 141 | - | 2.97 | 100 | 9.0 | 3.62 |
| 184 | - | 2.57 | 150 | 8.4 | 2.86 |
| 227 | 7.62 | 2.01 | 200 | 7.9 | 2.36 |

E. W. SCRIPPS; March 28, 1952; 2030 GCT; 34°30'N, 121°00'W; sounding, 600 fm; wind, 320°, force 3; weather, light fog; sea, slight; wire angle, 04°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.44 | 0 | 12.8 | 6.44 |
| 10 | 12.61 | 6.56 | 10 | 12.61 | 6.56 |
| 25 | - | 6.34 | 20 | 11.9 | 6.42 |
| 50 | - | 6.01 | 30 | 11.8 | 6.28 |
| 75 | - | 4.43 | 50 | 11.7 | 6.01 |
| 100 | 9.04 | 3.64 | 75 | 9.7 | 4.43 |
| 154 | - | 2.88 | 100 | 9.04 | 3.64 |
| 203 | - | 2.36 | 150 | 8.3 | 2.94 |
| 252 | 7.54 | 1.72 | 200 | 7.8 | 2.38 |
| 300 | 6.90 | 1.35 | 250 | 7.6 | 1.77 |
| 403 | 6.14 | 0.80 | 300 | 6.91 | 1.34 |
| 503 | 5.53 | 0.47 | 400 | 6.16 | 0.82 |
| 607 | 5.16 | 0.33 | 500 | 6.54 | 0.48 |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

E. W. SCRIPPS; March 28, 1952; 2330 GCT; 34°30'N, 121°00'W; sounding, 600 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 10°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.39 | 0 | 12.7 | 6.39 |
| 10 | 12.51 | 6.45 | 10 | 12.51 | 6.45 |
| 25 | - | 6.27 | 20 | 11.9 | 6.39 |
| 49 | - | 6.05 | 30 | 11.8 | 6.23 |
| 74 | - | 5.22 | 50 | 11.7 | 6.04 |
| 98 | 9.10 | 3.67 | 75 | 9.9 | 5.21 |
| 151 | - | 2.89 | 100 | 9.1 | 3.62 |
| 198 | - | 2.36 | 150 | 8.3 | 2.91 |
| 245 | 7.37 | 1.71 | 200 | 7.8 | 2.33 |

E. W. SCRIPPS; March 29, 1952; 0530 GCT; 34°30'N, 121°00'W; sounding, 600 fm; wind, 320°, force 5; weather, overcast; sea, moderate; wire angle, 26°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.47 | 0 | 12.5 | 6.47 |
| 9 | 12.47 | 6.48 | 10 | 12.4 | 6.48 |
| 23 | - | 6.44 | 20 | 11.9 | 6.45 |
| 50 | - | 6.06 | 30 | 11.8 | 6.39 |
| 72 | - | 4.69 | 50 | 11.6 | 6.06 |
| 98 | 9.08 | 3.58 | 75 | 9.6 | 4.60 |
| 144 | - | 2.95 | 100 | 9.0 | 3.55 |
| 192 | - | 2.57 | 150 | 8.4 | 2.91 |
| 244 | 7.54 | 2.04 | 200 | 7.9 | 2.50 |
| 287 | 7.37 | 1.63 | 250 | 7.52 | 1.99 |
| 391 | 6.26 | 0.95 | 300 | 7.21 | 1.54 |
| 493 | 5.70 | 0.60 | 400 | 6.21 | 0.93 |
| 600 | 5.24 | 0.47 | 500 | 5.67 | 0.59 |
| | | | 600 | 5.24 | 0.47 |

E. W. SCRIPPS; March 29, 1952; 1130 GCT; 34°30'N, 121°00'W; sounding, 600 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 35°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.42 | 0 | 12.4 | 6.42 |
| 8 | 12.36 | 6.40 | 10 | 12.3 | 6.40 |
| 20 | - | 6.40 | 20 | 12.3 | 6.40 |
| 44 | - | 5.84 | 30 | 12.0 | 6.29 |
| 64 | - | 4.48 | 50 | 11.2 | 5.39 |
| 86 | 9.20 | 3.63 | 75 | 9.4 | 4.01 |
| 126 | - | 2.99 | 100 | 9.0 | 3.34 |
| 166 | - | 2.71 | 150 | 8.3 | 2.83 |
| 213 | 7.77 | 2.17 | 200 | 7.88 | 2.34 |
| 253 | 7.37 | 1.62 | 250 | 7.42 | 1.66 |
| 358 | 6.30 | 0.97 | 300 | 6.87 | 1.31 |
| 448 | 5.84 | 0.68 | 400 | 6.03 | 0.82 |
| 552 | 5.53 | 0.40 | 500 | 5.68 | 0.53 |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

E. W. SCRIPPS; March 29, 1952; 0230 GCT; 34°30'N, 121°00'W; sounding, 600 fm; wind, 340°, force 4; weather, overcast; sea, moderate; wire angle, 31°.

778.558
K3
778.558
K4

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.48 | 0 | 12.5 | 6.48 |
| 8 | 12.34 | 6.47 | 10 | 12.3 | 6.45 |
| 21 | - | 6.35 | 20 | 12.1 | 6.38 |
| 43 | - | 5.97 | 30 | 11.9 | 6.23 |
| 64 | - | 4.60 | 50 | 11.6 | 5.55 |
| 86 | 9.04 | 3.58 | 75 | 9.7 | 3.99 |
| 132 | - | 2.93 | 100 | 8.8 | 3.38 |
| 175 | - | 2.47 | 150 | 8.3 | 2.74 |
| 218 | 7.62 | 2.01 | 200 | 7.8 | 2.21 |
| 262 | 7.28 | 1.60 | 250 | 7.4 | 1.71 |
| 354 | 6.50 | 1.09 | 300 | 6.99 | 1.39 |
| 444 | 5.76 | 0.68 | 400 | 6.09 | 0.88 |
| 543 | 5.44 | 0.46 | 500 | 5.58 | 0.54 |

E. W. SCRIPPS; March 29, 1952; 0831 GCT; 34°30'N, 121°00'W; sounding, 600 fm; wind, 330°, force 4; weather, partly cloudy; sea, moderate; wire angle, 08°.

778.558
K5
778.558
K6

| | | | |
|---|---|---|---|
| 0 | - | 0 | 12.5 |
| 10 | 12.39 | 10 | 12.39 |
| 25 | - | 20 | 12.4 |
| 54 | - | 30 | 12.2 |
| 79 | - | 50 | 12.0 |
| 108 | 9.30 | 75 | 11.3 |
| 161 | - | 100 | 9.4 |
| 214 | - | 150 | 8.9 |
| 272 | 7.47 | 200 | 8.2 |
| 320 | 7.00 | 250 | 7.70 |
| 432 | 5.85 | 300 | 7.21 |
| 539 | 5.27 | 400 | 6.13 |
| 649 | 3.09 | 500 | 5.46 |
| | | 600 | 5.16 |

E. W. SCRIPPS; March 29, 1952; 1430 GCT; 34°30'N, 121°00'W; sounding, 600 fm; wind, 340°, force 6; weather, overcast; sea, very rough; wire angle, 38°.

778.558
K7
778.558
K8

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.19 | 0 | 12.1 | 6.19 |
| 8 | 12.12 | 6.23 | 10 | 12.1 | 6.23 |
| 20 | - | 6.25 | 20 | 12.1 | 6.25 |
| 44 | - | 6.10 | 30 | 12.0 | 6.24 |
| 64 | - | 5.43 | 50 | 11.8 | 5.92 |
| 85 | 9.44 | - | 75 | 9.6 | |
| 123 | - | - | 100 | 8.9 | |
| 162 | - | - | 150 | 8.3 | |
| 208 | 7.87 | - | 200 | 7.9 | |
| 246 | 7.38 | - | 250 | 7.33 | |
| 340 | 6.49 | - | 300 | 6.82 | |
| 436 | 5.95 | - | 400 | 6.12 | |
| 538 | 5.59 | - | 500 | 5.69 | |



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| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

$77^{8.55}{}^{8}$
K9
$77^{9.53}$

E. W. SCRIPPS; March 29, 1952; 1730 GCT; 34°30'N, 121°00'W; sounding, 600 fm; wind, 310°, force 5; weather, overcast; sea, very rough; wire angle, 30°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.22 | 0 | 12.2 | 6.22 |
| 8 | - | 6.24 | 10 | 12.2 | 6.24 |
| 26 | 11.92 | 6.19 | 20 | 12.1 | 6.22 |
| 52 | - | 5.95 | 30 | 11.9 | 6.15 |
| 78 | - | 4.43 | 50 | 11.8 | 5.98 |
| 104 | - | 3.72 | 75 | 10.1 | 4.53 |
| 119 | 8.88 | 3.49 | 100 | 9.3 | 3.82 |
| 156 | - | 2.99 | 150 | 8.7 | 3.04 |
| 209 | - | 2.48 | 200 | 7.8 | 2.58 |
| 261 | 7.32 | 1.87 | 250 | 7.4 | 2.00 |
| 315 | 6.85 | 1.47 | 300 | 6.97 | 1.59 |
| 419 | 6.15 | 0.87 | 400 | 6.28 | 0.97 |
| 532 | 5.48 | 0.45 | 500 | 5.64 | 0.56 |
| 645 | 5.10 | 0.33 | 600 | 5.21 | 0.38 |

E. W. SCRIPPS; March 20, 1952; 2328 GCT; 34°46'N, 120°55.5'W; sounding, 130 fm; wind, 340°, force 6; weather, partly cloudy; sea, high; wire angle, 32°.

| | | | | | |
|---|---|---|---|---|---|
| 8 | 11.71 | | 0 | 11.7 | |
| 26 | 11.50 | | 10 | 11.70 | |
| 51 | 10.94 | | 20 | 11.70 | |
| 76 | 10.13 | | 30 | 11.43 | |
| 102 | 8.80 | | 50 | 11.00 | |
| | | | 75 | 10.20 | |
| | | | 100 | 8.82 | |

$78^{4.52}{}^{5}$

$78^{4.55}$

E. W. SCRIPPS; March 27, 1952; 1449 GCT; 34°41.5'N, 120°49.5'W; sounding, 64 fm; wind, 130°, force 2; weather, fog; sea, rough; wire angle, 03°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 11.20 | 6.50 | 0 | 11.20 | 6.50 |
| 10 | 11.08 | 6.20 | 10 | 11.08 | 6.20 |
| 25 | 10.89 | 5.73 | 20 | 10.96 | 5.94 |
| 50 | 10.42 | 4.76 | 30 | 10.81 | 5.59 |
| 75 | 9.64 | 3.59 | 50 | 10.42 | 4.76 |
| 100 | 9.15 | 2.82 | 75 | 9.64 | 3.59 |
| | | | 100 | 9.15 | 2.82 |

E. W. SCRIPPS; March 27, 1952; 1256 GCT; 34°36'N, 121°00'W; sounding, 375 fm; wind, calm; weather, clear; sea, calm; wire angle, 00°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.40 | 0 | 12.4 | 6.40 |
| 10 | 12.10 | 6.46 | 10 | 12.10 | 6.46 |
| 25 | - | 6.15 | 20 | 12.0 | 6.31 |
| 50 | - | 5.40 | 30 | 11.9 | 6.04 |
| 75 | - | 4.24 | 50 | 11.3 | 5.40 |
| 99 | 9.07 | 3.75 | 75 | 9.3 | 4.24 |
| 152 | - | 2.90 | 100 | 9.1 | 3.72 |
| 199 | - | 2.62 | 150 | 8.4 | 2.94 |
| 246 | 7.38 | 1.96 | 200 | 7.9 | 2.61 |
| 294 | 6.93 | 1.45 | 250 | 7.34 | 1.92 |
| 394 | 6.02 | 0.83 | 300 | 6.87 | 1.41 |
| 491 | 5.70 | 0.54 | 400 | 6.00 | 0.80 |
| 595 | 5.33 | 0.52 | 500 | 5.66 | 0.53 |

$78^{4.57}{}^{5}$

$78^{4.60}$

E. W. SCRIPPS; March 27, 1952; 1048 GCT; 34°31'N, 121°10.5'W; sounding, 550 fm; wind, calm; weather, clear; sea, calm; wire angle, 00°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.40 | 0 | 12.4 | 6.40 |
| 10 | 12.31 | 6.49 | 10 | 12.31 | 6.49 |
| 30 | - | 6.24 | 20 | 12.0 | 6.39 |
| 50 | - | 6.09 | 30 | 11.8 | 6.24 |
| 75 | - | 6.24 | 50 | 11.7 | 6.09 |
| 100 | 9.34 | 3.63 | 75 | 9.7 | 6.24 |
| 154 | - | 2.90 | 100 | 9.34 | 3.63 |
| 203 | - | 2.56 | 150 | 8.3 | 2.96 |
| 251 | 7.42 | 2.27 | 200 | 7.9 | 2.58 |
| 300 | 7.16 | 1.52 | 250 | 7.44 | 2.27 |
| 403 | 6.14 | 0.88 | 300 | 7.16 | 1.52 |
| 501 | 5.62 | 0.66 | 400 | 6.18 | 0.89 |
| 605 | 5.06 | 0.47 | 500 | 5.64 | 0.66 |

E. W. SCRIPPS; March 27, 1952; 0825 GCT; 34°26.5'N, 121°21'W; sounding, 1125 fm; wind, calm; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.20 | 0 | 12.8 | 6.20 |
| 10 | 12.08 | 6.33 | 10 | 12.08 | 6.33 |
| 25 | - | 6.24 | 20 | 11.8 | 6.29 |
| 50 | - | 5.98 | 30 | 11.8 | 6.22 |
| 75 | - | 5.00 | 50 | 11.7 | 5.98 |
| 99 | 9.22 | 3.81 | 75 | 9.5 | 5.00 |
| 151 | - | 2.91 | 100 | 9.2 | 3.79 |
| 197 | - | 2.82 | 150 | 8.6 | 2.92 |
| 245 | 7.40 | 2.18 | 200 | 8.0 | 2.78 |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

E. W. SCRIPPS; March 24, 1952; 1325, 1413 GCT; 34°21'N, 121°29.5'W; sounding, 1900 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 42°, 17°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.28 | 0 | 11.9 | 6.28 |
| 9 | 11.87 | 6.07 | 10 | 11.9 | 6.07 |
| 23 | - | 6.17 | 20 | 11.9 | 6.16 |
| 52 | - | 6.17 | 30 | 11.9 | 6.17 |
| 75 | - | 6.14 | 50 | 11.9 | 6.17 |
| 101 | 9.39 | 4.11 | 75 | 11.9 | 6.14 |
| | | | 100 | 9.4 | 4.15 |
| 116 | - | 3.98 | 150 | 8.6 | 3.08 |
| 151 | - | 3.06 | | | |
| 190 | 8.10 | 2.92 | | | |

E. W. SCRIPPS; March 27, 1952; 1638 GCT; 34°32.5'N, 120°43.5'W; sounding, 58 fm; wind, 130°, force 1; weather, fog; sea, rough; wire angle, 00°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 11.32 | 5.94 | 0 | 11.32 | 5.94 |
| 10 | 11.14 | 5.77 | 10 | 11.14 | 5.77 |
| 25 | 10.74 | 5.21 | 20 | 10.91 | 5.44 |
| 50 | 9.82 | 3.78 | 30 | 10.55 | 4.89 |
| 75 | 9.61 | 3.34 | 50 | 9.82 | 3.78 |
| | | | 75 | 9.61 | 3.34 |

E. W. SCRIPPS; March 27, 1952; 2055, 2115 GCT; 34°22.5'N, 121°05'W; sounding, 675 fm; wind, 140°, force 1; weather, cloudy; sea, moderate; wire angle, 10°, 13°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.34 | 0 | 12.8 | 6.34 |
| 10 | 12.13 | 6.45 | 10 | 12.13 | 6.45 |
| 25 | - | 6.34 | 20 | 12.0 | 6.43 |
| 49 | - | 5.57 | 30 | 11.9 | 6.18 |
| 74 | - | 4.86 | 50 | 11.8 | 5.54 |
| 98 | 9.22 | 3.83 | 75 | 10.3 | 4.84 |
| 152 | - | 2.98 | 100 | 9.2 | 3.76 |
| 199 | - | 2.93 | 150 | 8.4 | 2.99 |
| 247 | 7.63 | 2.27 | 200 | 8.1 | 2.92 |
| | | | 250 | 7.62 | 2.23 |
| 296 | 7.18 | 1.69 | 300 | 7.13 | 1.63 |
| 396 | 6.28 | 0.84 | 400 | 6.24 | 0.83 |
| 492 | 5.59 | 0.46 | 500 | 5.55 | 0.44 |
| 597 | 5.04 | 0.34 | | | |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

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E. W. SCRIPPS; March 27, 1952; 0621 GCT; 34°21'N, 121°29.5'W; sounding, 1950 fm; wind, calm; weather, overcast; sea, rough; wire angle, 00°. 78⁴.62⁵ 78⁴.62⁵

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.16 | 0 | 12.3 | 6.16 |
| 10 | 12.15 | 6.15 | 10 | 12.15 | 6.15 |
| 25 | - | 6.15 | 20 | 12.1 | 6.15 |
| 50 | - | 5.97 | 30 | 12.1 | 6.15 |
| 75 | - | 4.80 | 50 | 11.9 | 5.97 |
| 99 | 9.02 | 3.91 | 75 | 10.1 | 4.80 |
| 151 | - | 2.89 | 100 | 9.0 | 3.89 |
| 198 | - | 2.80 | 150 | 8.4 | 2.90 |
| 244 | 7.22 | 2.11 | 200 | 7.8 | 2.79 |

E. W. SCRIPPS; March 27, 1952; 1847 GCT; 34°27.5'N, 120°53.5'W; sounding, 415 fm; wind, 180°, force 2; weather, fog; sea, rough; wire angle, 05°. 79².52⁵ 79².55

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.29 | 0 | 12.7 | 6.29 |
| 10 | 12.12 | 6.30 | 10 | 12.12 | 6.30 |
| 25 | - | 6.35 | 20 | 12.1 | 6.33 |
| 50 | - | 6.72 | 30 | 12.1 | 6.40 |
| 75 | - | 4.51 | 50 | 11.7 | 6.72 |
| 99 | 9.08 | 3.59 | 75 | 10.0 | 4.51 |
| 153 | - | 3.04 | 100 | 9.1 | 3.58 |
| 201 | - | 2.33 | 150 | 8.4 | 3.09 |
| 250 | 7.26 | 1.97 | 200 | 7.8 | 2.34 |
| | | | 250 | 7.26 | 1.97 |

E. W. SCRIPPS; March 27, 1952; 2323, 2343 GCT; 34°20'N, 121°15.5'W; sounding, 1075 fm; wind, 180°, force 1; weather, overcast; sea, slight; wire angle, 05°, 03°. 79².57⁵ 79².60

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.29 | 0 | 12.9 | 6.29 |
| 10 | 12.17 | 6.36 | 10 | 12.17 | 6.36 |
| 25 | - | 6.09 | 20 | 11.9 | 6.22 |
| 50 | - | 5.97 | 30 | 11.9 | 6.04 |
| 75 | - | 4.36 | 50 | 11.8 | 5.97 |
| 100 | 9.10 | 3.49 | 75 | 10.0 | 4.36 |
| 153 | - | 2.86 | 100 | 9.10 | 3.49 |
| 203 | - | 2.45 | 150 | 8.3 | 2.89 |
| 252 | 7.26 | 1.92 | 200 | 7.8 | 2.48 |
| | | | 250 | 7.27 | 1.94 |
| 301 | 6.84 | 1.68 | 300 | 6.86 | 1.68 |
| 404 | 6.02 | 0.95 | 400 | 6.05 | 0.97 |
| 503 | 5.64 | 0.60 | 500 | 5.66 | 0.61 |
| 607 | 5.10 | 0.35 | 600 | 5.14 | 0.37 |

S10

CCOFI
5203

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

79$^{2}$62$^{5}$

80.52$^{5}$

E.W.SCRIPPS; March 28, 1952; 0205 GCT; 34°12.5'N, 121°25.5'W; sounding, 1200 fm; wind, 200°, force 2; weather, overcast; sea, moderate; wire angle, 07°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.15 | 0 | 12.8 | 6.15 |
| 10 | 12.32 | 6.20 | 10 | 12.32 | 6.20 |
| 25 | - | 6.15 | 20 | 12.1 | 6.18 |
| 50 | - | 6.02 | 30 | 11.9 | 6.12 |
| 75 | - | 4.34 | 50 | 11.7 | 6.02 |
| 99 | 9.52 | 2.89 | 75 | 11.3 | 4.34 |
| 152 | - | 2.82 | 100 | 9.51 | 2.85 |
| 200 | - | 2.02 | 150 | 8.6 | 2.83 |
| 249 | 7.44 | 2.00 | 200 | 7.8 | 2.02 |
| 297 | 6.96 | 1.50 | 250 | 7.42 | 2.00 |
| 398 | 6.11 | 1.09 | 300 | 6.92 | 1.49 |
| 496 | 5.62 | 0.51 | 400 | 6.11 | 1.07 |
| 601 | 5.03 | - | 500 | 5.59 | (0.51) |
| | | | 600 | 5.04 | |

E.W.SCRIPPS; March 22, 1952; 1556 GCT; 34°23.5'N, 120°37.5'W; sounding, 175 fm; wind, 290°, force 3; weather, clear; sea, rough; wire angle, 07°.

| | | | |
|---|---|---|---|
| 0 | - | 0 | 10.8 |
| 5 | 10.75 | 10 | 10.7 |
| 22 | 10.78 | 20 | 10.8 |
| 56 | - | 30 | 10.7 |
| 77 | - | 50 | 10.5 |
| 99 | 9.03 | 75 | 9.7 |
| | | 100 | 9.0 |

80.52$^{5}$

80.55

E. W. SCRIPPS; March 28, 1952; 1353 GCT; 34°24'N, 120°37.5'W; sounding, 180 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 03°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 5.65 | 0 | 11.1 | 5.65 |
| 10 | 11.04 | 5.67 | 10 | 11.04 | 5.67 |
| 25 | - | 5.62 | 20 | 11.0 | 5.67 |
| 50 | - | 4.33 | 30 | 10.9 | 5.55 |
| 75 | 9.64 | 3.24 | 50 | 10.3 | 4.33 |
| 100 | 9.27 | 2.76 | 75 | 9.64 | 3.24 |
| 155 | 8.40 | 2.09 | 100 | 9.27 | 2.76 |
| 204 | 8.20 | 1.76 | 150 | 8.45 | 2.16 |
| 254 | 7.80 | 1.55 | 200 | 8.23 | 1.77 |
| 304 | 7.48 | 0.92 | 250 | 7.83 | 1.59 |
| | | | 300 | 7.49 | 0.99 |

E.W.SCRIPPS; March 22, 1952; 1835 GCT; 34°18.5'N, 120°48'W; sounding, 420 fm; wind, 060°, force 2; weather, clear; sea, very rough; wire angle, 13°.

| | | | |
|---|---|---|---|
| 0 | - | 0 | 11.3 |
| 10 | 11.15 | 10 | 11.15 |
| 24 | - | 20 | 11.1 |
| 48 | - | 30 | 11.1 |
| 73 | - | 50 | 11.1 |
| 96 | 9.60 | 75 | 11.0 |
| 145 | - | 100 | 9.6 |
| 191 | - | 150 | 8.9 |
| 237 | 8.08 | 200 | 8.3 |

80.55

80.57$^{5}$

E. W. SCRIPPS; March 28, 1952; 1053 GCT; 34°19'N, 120°48'W; sounding, 415 fm; wind, 340°, force 2; weather, fog; sea, slight; wire angle, 20°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.30 | 0 | 12.5 | 6.30 |
| 9 | 12.41 | 6.27 | 10 | 12.4 | 6.27 |
| 24 | - | 6.31 | 20 | 12.1 | 6.30 |
| 47 | - | 6.22 | 30 | 11.8 | 6.32 |
| 70 | - | 5.50 | 50 | 11.6 | 6.19 |
| 94 | 8.99 | 3.71 | 75 | 10.5 | 5.00 |
| 143 | - | 2.76 | 100 | 8.9 | 3.60 |
| 188 | - | 2.11 | 150 | 8.2 | 2.68 |
| 233 | 7.67 | 1.40 | 200 | 7.9 | 1.87 |
| 279 | 7.40 | 1.21 | 250 | 7.6 | 1.30 |
| 376 | 6.66 | 0.84 | 300 | 7.2 | 1.13 |
| 470 | 6.14 | 0.62 | 400 | 6.5 | 0.78 |
| 574 | 5.50 | 0.40 | 500 | 5.95 | 0.55 |

E. W. SCRIPPS; March 22, 1952; 2107 GCT; 34°14'N, 120°58'W; sounding, 510 fm; wind, 310°, force 2; weather, clear; sea, moderate; wire angle, 02°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.13 | 0 | 12.3 | 6.13 |
| 10 | 12.03 | 6.17 | 10 | 12.03 | 6.17 |
| 25 | - | 6.21 | 20 | 12.0 | 6.20 |
| 50 | - | 6.16 | 30 | 12.0 | 6.22 |
| 75 | - | 5.55 | 50 | 12.0 | 6.16 |
| 100 | 10.57 | 4.67 | 75 | 11.4 | 5.55 |
| 154 | - | 2.79 | 100 | 10.57 | 4.67 |
| 203 | - | 2.27 | 150 | 9.0 | 2.85 |
| 252 | 8.13 | 1.70 | 200 | 8.5 | 2.30 |
| 302 | 7.56 | 1.28 | 250 | 8.2 | 1.73 |
| 406 | 6.45 | 0.87 | 300 | 7.57 | 1.30 |
| 505 | 6.00 | 0.50 | 400 | 6.49 | 0.89 |
| 610 | 5.19 | 0.32 | 500 | 6.04 | 0.52 |
| | | | 600 | 5.28 | 0.34 |

SIO
CCOFI
5203

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

E. W. SCRIPPS; March 28, 1952; 0830 GCT; 34°14'N, 120°58.5'W; sounding, 480 fm; wind, 140°, force 1; weather, fog; sea, slight; wire angle, 17°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.24 | 0 | 12.6 | 6.24 |
| 9 | 12.53 | 6.28 | 10 | 12.5 | 6.28 |
| 24 | - | 6.22 | 20 | 12.3 | 6.24 |
| 48 | - | 6.05 | 30 | 12.1 | 6.18 |
| 72 | - | 5.00 | 50 | 12.0 | 6.01 |
| 95 | 9.08 | 3.64 | 75 | 10.1 | 4.75 |
| 147 | - | 3.13 | 100 | 9.0 | 3.59 |
| 194 | - | 2.88 | 150 | 8.3 | 3.12 |
| 240 | 7.57 | 2.26 | 200 | 8.1 | 2.81 |
| 287 | 7.47 | 1.78 | 250 | 7.52 | 2.14 |
| 386 | 6.42 | 1.20 | 300 | 7.40 | 1.71 |
| 480 | 5.89 | 0.57 | 400 | 6.34 | 1.11 |
| 583 | 5.15 | 0.38 | 500 | 5.74 | 0.52 |

E. W. SCRIPPS; March 28, 1952; 0615 GCT; 34°08.5'N, 121°09'W; sounding, 1140 fm; wind, 340°, force 1; weather, overcast; sea, slight; wire angle, 10°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.26 | 0 | 12.7 | 6.26 |
| 10 | 12.46 | 6.20 | 10 | 12.46 | 6.20 |
| 24 | - | 6.20 | 20 | 12.1 | 6.20 |
| 49 | - | 6.04 | 30 | 12.1 | 6.21 |
| 74 | - | 4.90 | 50 | 12.0 | 6.03 |
| 98 | 9.12 | 4.05 | 75 | 9.7 | 4.89 |
| 150 | - | 3.17 | 100 | 9.1 | 3.98 |
| 199 | - | 2.80 | 150 | 8.6 | 3.17 |
| 246 | 7.37 | 2.24 | 200 | 7.8 | 2.77 |
| 294 | 7.00 | 1.70 | 250 | 7.33 | 2.20 |
| 394 | 6.27 | 1.02 | 300 | 6.96 | 1.64 |
| 493 | 5.80 | 0.68 | 400 | 6.23 | 1.01 |
| 597 | 5.35 | 0.49 | 500 | 5.77 | 0.66 |

E. W. SCRIPPS; March 28, 1952; 0417 GCT; 34°04'N, 121°19'W; sounding, 1650 fm; wind, 240°, force 1; weather, overcast; sea, moderate; wire angle, 03°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.29 | 0 | 12.7 | 6.29 |
| 10 | 12.49 | 6.30 | 10 | 12.49 | 6.30 |
| 25 | - | 6.30 | 20 | 12.1 | 6.30 |
| 50 | - | 6.02 | 30 | 11.95 | 6.29 |
| 75 | - | 5.20 | 50 | 11.9 | 6.02 |
| 99 | 9.80 | 4.48 | 75 | 10.9 | 5.20 |
| 152 | - | 3.27 | 100 | 9.79 | 4.44 |
| 199 | - | 2.92 | 150 | 9.3 | 3.29 |
| 247 | 7.69 | 2.01 | 200 | 8.2 | 2.90 |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

80.57[5]

E. W. SCRIPPS; March 22, 1952; 2332 GCT; 34°09'N, 121°09'W; sounding, 1230 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 05°.

80.60

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.18 | 0 | 12.2 | 6.18 |
| 10 | 12.02 | 6.24 | 10 | 12.02 | 6.24 |
| 25 | - | 6.19 | 20 | 11.9 | 6.22 |
| 50 | - | 6.08 | 30 | 11.9 | 6.17 |
| 75 | - | 5.54 | 50 | 11.9 | 6.08 |
| 99 | 10.34 | 4.29 | 75 | 11.7 | 5.54 |
| 153 | - | 3.24 | 100 | 10.3 | 4.27 |
| 202 | - | 2.42 | 150 | 8.9 | 3.33 |
| 251 | 8.04 | 1.87 | 200 | 8.4 | 2.45 |
| 300 | 7.77 | 1.22 | 250 | 8.04 | 1.89 |
| 404 | 6.78 | 0.84 | 300 | 7.77 | 1.22 |
| 504 | 5.96 | 0.60 | 400 | 6.82 | 0.87 |
| 609 | 5.37 | 0.34 | 500 | 6.01 | 0.61 |
| | | | 600 | 5.41 | 0.37 |

80.60

E. W. SCRIPPS; March 23, 1952; 0200 GCT; 34°04'N, 121°20'W; sounding, 1750 fm; wind, 340°, force 2; weather, partly cloudy; sea, very rough; wire angle, 14°.

80.62[5]

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.34 | 0 | 12.7 | 6.34 |
| 10 | 12.12 | 6.36 | 10 | 12.12 | 6.36 |
| 24 | - | 6.32 | 20 | 12.0 | 6.34 |
| 48 | - | 6.20 | 30 | 11.9 | 6.29 |
| 72 | - | 6.12 | 50 | 11.9 | 6.18 |
| 97 | 10.52 | 4.48 | 75 | 11.9 | 6.10 |
| 149 | - | 2.89 | 100 | 10.4 | 4.38 |
| 195 | - | 2.18 | 150 | 9.2 | 2.87 |
| 242 | 8.04 | 1.73 | 200 | 8.5 | 2.13 |

80.62[5]

SIO

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5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **60.55** | HORIZON; April 6, 1952; 1439 GCT; 37°47.5'N, 123°15'W; sounding, 65 fm; wind, 180°, force 3; weather, overcast; sea, slight; wire angle, 01°.[a] | | | | | | | | | | |
| 0 | 9.58 | 33.35 | 5.68 | 225 | 0 | 9.58 | 33.35 | 5.68 | 25.76 | 225 | 0.00 |
| 10 | 9.29 | 33.40 | 5.18 | 217 | 10 | 9.29 | 33.40 | 5.18 | 25.84 | 217 | 0.02 |
| 20 | - | 33.46 | 4.90 | | 20 | 9.2 | 33.46 | 4.90 | 25.90 | 211 | 0.04 |
| 30 | 9.08 | 33.49 | 4.74 | 207 | 30 | 9.08 | 33.49 | 4.74 | 25.95 | 207 | 0.06 |
| 50 | 8.99 | 33.60 | 3.65 | 197 | 50 | 8.99 | 33.60 | 3.65 | 26.05 | 197 | 0.10 |
| 75 | 8.68 | 33.84 | 2.79 | 175 | 75 | 8.68 | 33.84 | 2.79 | 26.28 | 175 | 0.15 |
| 100 | 8.36 | 33.87 | 2.51 | 168 | 100 | 8.36 | 33.87 | 2.51 | 26.35 | 168 | 0.20 |
| **60.60** | HORIZON; April 6, 1952; 1042 GCT; 37°37'N, 123°37'W; sounding, 1850 fm; wind, 180°, force 3; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 32.81 | 6.37 | | 0 | 10.5 | 32.81 | 6.37 | 25.18 | 279 | 0.00 |
| 10 | 10.41 | 32.84 | 6.37 | 276 | 10 | 10.41 | 32.84 | 6.37 | 25.22 | 276 | 0.03 |
| 74 | - | 33.35 | 4.94 | | 20 | | 32.89 | 6.33 | | | |
| 99 | - | 33.51 | 4.42 | | 30 | | 32.95 | 6.14 | | | |
| 150 | 8.18 | 33.77 | 3.31 | 173 | 50 | | 33.14 | 5.58 | | | |
| 196 | - | 33.96 | 2.43 | | 75 | | 33.36 | 4.94 | | | |
| 242 | 7.64 | 34.04 | 2.02 | 145 | 100 | | 33.52 | 4.41 | | | |
| 289 | 7.04 | 34.08 | 1.46 | 134 | 150 | 8.18 | 33.77 | 3.31 | 26.30 | 173 | 0.00b) |
| 387 | 6.13 | 34.13 | 0.95 | 119 | 200 | 7.96 | 33.97 | 2.36 | 26.49 | 155 | 0.08b) |
| 480 | 5.37 | 34.14 | 0.66 | 109 | 250 | 7.56 | 34.05 | 1.94 | 26.61 | 143 | 0.16b) |
| 576 | 4.92 | 34.18 | 0.44 | 101 | 300 | 6.91 | 34.09 | 1.39 | 26.74 | 132 | 0.23b) |
| 770 | 4.31 | 34.40 | 0.28 | 78 | 400 | 6.00 | 34.13 | 0.89 | 26.89 | 117 | 0.36b) |
| 960 | 3.87 | 34.42 | 0.33 | 73 | 500 | 5.26 | 34.14 | 0.60 | 26.99 | 108 | 0.47b) |
| 1163 | 3.32 | 34.49 | 0.60 | 62 | 600 | 4.83 | 34.21 | 0.41 | 27.09 | 98 | 0.58b) |
| | | | | | 700 | 4.50 | 34.34 | 0.32 | 27.23 | 85 | 0.68b) |
| | | | | | 800 | 4.25 | 34.41 | 0.30 | 27.31 | 77 | 0.77b) |
| | | | | | 1000 | 3.77 | 34.43 | 0.37 | 27.38 | 71 | 0.93b) |
| **60.70** | HORIZON; April 6, 1952; 0527 GCT; 37°19'N, 124°21'W; sounding, 2200 fm; wind, 160°, force 3; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 32.94 | 6.39 | | 0 | 11.5 | 32.94 | 6.39 | 25.10 | 287 | 0.00 |
| 10 | 11.36 | 32.92 | 6.37 | 286 | 10 | 11.36 | 32.92 | 6.37 | 25.11 | 286 | 0.03 |
| 25 | - | 32.90 | 6.42 | | 20 | 11.3 | 32.90 | 6.39 | 25.11 | 286 | 0.06 |
| 50 | 10.84 | 32.94 | 6.32 | 276 | 30 | 11.2 | 32.90 | 6.40 | 25.13 | 285 | 0.09 |
| 73 | - | 32.90 | 6.12 | | 50 | 10.84 | 32.94 | 6.32 | 25.22 | 276 | 0.14 |
| 97 | 10.57 | 33.46 | 3.92 | 233 | 75 | 10.4 | 32.90 | 6.10 | 25.27 | 271 | 0.21 |
| 146 | 9.68 | 33.69 | 3.09 | 201 | 100 | 10.60 | 33.49 | 3.86 | 25.69 | 231 | 0.27 |
| 193 | - | 33.89 | 2.56 | | 150 | 9.60 | 33.71 | 3.04 | 26.03 | 198 | 0.38 |
| 238 | 8.16 | 34.02 | 2.24 | 154 | 200 | 8.69 | 33.93 | 2.47 | 26.35 | 168 | 0.48 |
| 285 | 7.68 | 34.05 | 1.97 | 145 | 250 | 8.00 | 34.03 | 2.18 | 26.53 | 151 | 0.56 |
| 383 | 6.40 | 34.13 | 1.22 | 122 | 300 | 7.53 | 34.05 | 1.86 | 26.62 | 143 | 0.63 |
| 479 | 5.60 | 34.18 | 0.71 | 109 | 400 | 6.21 | 34.15 | 1.11 | 26.88 | 118 | 0.77 |
| 583 | 5.01 | 34.20 | 0.44 | 101 | 500 | 5.47 | 34.19 | 0.65 | 27.00 | 107 | 0.89 |
| | | | | | 600 | (4.94). | (34.20) | | (27.07) | (100) | (1.00) |

a) The E. W. Scripps occupied hydrographic stations during a special upwelling study in April. These stations appear on page 156 following the regular stations of Cruise 5204.

b) This value is calculated with respect to the 150-decibar surface rather than the sea surface.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m | |
| HORIZON; April 6, 1952; 0049 GCT; 37°02'N, 125°01'W; sounding, 2370 fm; wind, 180°, force 1; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | | 60.80 |
| 0 | 11.57 | 32.77 | 6.37 | 301 | 0 | 11.57 | 32.77 | 6.37 | 24.96 | 301 | 0.00 | |
| 25 | - | 32.77 | 6.37 | | 10 | 11.5 | 32.77 | 6.37 | 24.97 | 299 | 0.03 | |
| 50 | - | 32.79 | 5.64u | | 20 | 11.5 | 32.77 | 6.37 | 24.97 | 299 | 0.06 | |
| 74 | - | 32.79 | 6.25 | | 30 | 11.4 | 32.77 | | 24.99 | 298 | 0.09 | |
| 126 | - | 33.12 | 5.07 | | 50 | 11.2 | 32.79 | | 25.04 | 293 | 0.15 | |
| 174 | - | 33.66 | 4.08 | | 75 | 11.2 | 32.79 | 6.25 | 25.04 | 293 | 0.22 | |
| 221 | 7.51 | 33.87 | 3.72 | 156 | 100 | 9.9 | 32.86 | 5.74 | 25.32 | 266 | 0.29 | |
| 267 | 7.32 | 33.98 | 2.26 | 145 | 150 | 8.5 | 33.44 | 4.54 | 26.00 | 202 | 0.41 | |
| 365 | 6.37 | 34.07 | 1.31 | 126 | 200 | 7.8 | 33.80 | 3.89 | 26.38 | 165 | 0.50 | |
| 457 | 5.53 | 34.09 | 0.89 | 115 | 250 | 7.38 | 33.95 | 2.73 | 26.56 | 148 | 0.58 | |
| 555 | 4.93 | 34.14 | 0.57 | 104 | 300 | 7.10 | 34.03 | 1.81 | 26.66 | 139 | 0.66 | |
| 729 | 4.33 | 34.16u | 0.29 | 97 | 400 | 6.01 | 34.08 | 1.13 | 26.85 | 121 | 0.79 | |
| 938 | 3.86 | 34.40 | 0.37 | 74 | 500 | 5.22 | 34.11 | 0.75 | 26.97 | 110 | 0.91 | |
| 1140 | 3.35 | 34.47 | 0.55 | 64 | 600 | 4.75 | | 0.46 | | | | |
| | | | | | 700 | 4.42 | | 0.30 | | | | |
| | | | | | 800 | 4.15 | | 0.30 | | | | |
| | | | | | 1000 | 3.73 | | 0.43 | | | | |
| HORIZON; April 5, 1952; 1912 GCT; 36°36'N, 125°47.5'W; sounding, 2400 fm; wind, 200°, force 2; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | | 60.90 |
| 0 | - | 32.84 | 6.16 | | 0 | 12.1 | 32.84 | 6.16 | 24.92 | 305 | 0.00 | |
| 10 | 11.94 | 32.92 | 6.16 | 296 | 10 | 11.94 | 32.92 | 6.16 | 25.01 | 296 | 0.03 | |
| 25 | - | 32.83 | 6.12 | | 20 | 11.8 | 32.88 | 6.14 | 25.00 | 296 | 0.06 | |
| 50 | 11.74 | 32.84 | 6.14 | 298 | 30 | 11.8 | 32.83 | 6.14 | 24.96 | 300 | 0.09 | |
| 75 | - | 32.90 | 6.09 | | 50 | 11.74 | 32.84 | 6.12 | 24.98 | 298 | 0.15 | |
| 98 | 9.73 | 33.15 | 4.84 | 242 | 75 | 11.5 | 32.90 | 6.09 | 25.07 | 290 | 0.22 | |
| 151 | 9.10 | 33.64 | 3.19 | 196 | 100 | 9.71 | 33.20 | 4.80 | 25.62 | 238 | 0.29 | |
| 197 | 8.57 | 33.89 | 2.42 | 170 | 150 | 9.11 | 33.64 | 3.19 | 26.06 | 196 | 0.40 | |
| 244 | 8.04 | 34.00 | 2.10 | 154 | 200 | 8.53 | 33.90 | 2.41 | 26.35 | 168 | 0.49 | |
| 290 | 7.54 | 34.07 | 1.77 | 142 | 250 | 7.99 | 34.01 | 2.05 | 26.52 | 152 | 0.57 | |
| 390 | 6.61 | 34.08 | 1.03 | 129 | 300 | 7.44 | 34.07 | 1.70 | 26.65 | 140 | 0.65 | |
| 486 | 5.99 | 34.18 | 0.58 | 114 | 400 | 6.53 | 34.08 | 0.99 | 26.78 | 128 | 0.79 | |
| 590 | 5.47 | 34.25 | 0.41 | 102 | 500 | 5.91 | 34.19 | 0.54 | 26.95 | 112 | 0.91 | |
| | | | | | 600 | (5.40) | (34.25) | (0.41) | (27.06) | (101) | (1.03) | |
| HORIZON; April 7, 1952; 2335 GCT; 37°19'N, 122°36'W; sounding, 45 fm; wind, 230°, force 1; weather, cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | | | 63.52 |
| 0 | 10.32 | 32.99 | 6.03 | 263 | 0 | 10.32 | 32.99 | 6.03 | 25.35 | 263 | 0.00 | |
| 10 | 9.95 | 33.13 | 5.23 | 247 | 10 | 9.95 | 33.13 | 5.23 | 25.52 | 247 | 0.03 | |
| 20 | 9.51 | 33.42 | 3.78 | 219 | 20 | 9.51 | 33.42 | 3.78 | 25.82 | 219 | 0.05 | |
| 30 | 9.10 | 33.58 | 3.11 | 200 | 30 | 9.10 | 33.58 | 3.11 | 26.01 | 200 | 0.07 | |
| 50 | 8.69 | 33.80 | 2.46 | 178 | 50 | 8.69 | 33.80 | 2.46 | 26.25 | 178 | 0.11 | |
| HORIZON; April 7, 1952; 2130 GCT; 37°14'N, 122°49.5'W; sounding, 110 fm; wind, 310°, force 2; weather, cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | | | 63.55 |
| 0 | 11.45 | 32.94 | 6.32 | 286 | 0 | 11.45 | 32.94 | 6.32 | 25.11 | 286 | 0.00 | |
| 10 | 11.31 | 32.94 | 6.37 | 283 | 10 | 11.31 | 32.94 | 6.37 | 25.14 | 283 | 0.03 | |
| 25 | 11.01 | 32.95 | 6.37 | 278 | 20 | 11.12 | 32.95 | 6.36 | 25.18 | 279 | 0.06 | |
| 50 | 9.68 | 33.25 | 5.60 | 234 | 30 | 10.89 | 32.97 | 6.31 | 25.24 | 274 | 0.08 | |
| 75 | - | 33.39 | 5.14 | | 50 | 9.68 | 33.25 | 5.60 | 25.66 | 234 | 0.14 | |
| 100 | 9.39 | 33.56 | 4.54 | 206 | 75 | 9.51 | 33.39 | 5.14 | 25.80 | 221 | 0.19 | |
| 125 | 8.84 | 33.73 | 2.99 | 185 | 100 | 9.39 | 33.56 | 4.54 | 25.95 | 206 | 0.25 | |
| 155 | 8.28 | 33.89 | 2.15 | 165 | 150 | 8.34 | 33.87 | 2.27 | 26.36 | 168 | 0.34 | |
| HORIZON; April 8, 1952; 0426 GCT; 36°49'N, 122°04.5'W; sounding, 55 fm; wind, 310°, force 3; weather, partly cloudy; sea, slight; wire angle, 02°. | | | | | | | | | | | | 67.50 |
| 0 | 10.89 | 32.86 | 6.25 | 282 | 0 | 10.89 | 32.86 | 6.25 | 25.15 | 282 | 0.00 | |
| 10 | 10.30 | 33.13 | 5.35 | 253 | 10 | 10.30 | 33.13 | 5.35 | 25.46 | 253 | 0.03 | |
| 20 | 10.07 | 33.35 | 4.91 | 233 | 20 | 10.07 | 33.35 | 4.91 | 25.67 | 233 | 0.05 | |
| 30 | 9.86 | 33.42 | 4.55 | 224 | 30 | 9.86 | 33.42 | 4.55 | 25.76 | 224 | 0.07 | |
| 50 | - | 33.49 | 4.42 | | 50 | 9.49 | 33.49 | 4.42 | 25.88 | 213 | 0.12 | |
| 75 | 9.12 | 33.69 | 3.19 | 193 | 75 | 9.12 | 33.69 | 3.19 | 26.09 | 193 | 0.17 | |

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5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **67.55** | HORIZON; April 8, 1952; 0726 GCT; 36°39.5'N, 122°26'W; sounding, 1350 fm; wind, 320°, force 4; weather, overcast; sea, confused; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 32.66 | 6.32 | | 0 | 11.8 | 32.66 | 6.32 | 24.83 | 313 | 0.00 |
| 10 | 11.58 | 32.70 | 6.33 | 306 | 10 | 11.58 | 32.70 | 6.33 | 24.90 | 306 | 0.03 |
| 25 | - | 32.97 | 5.94 | | 20 | 11.3 | 32.81 | 6.29 | 25.04 | 293 | 0.06 |
| 50 | 9.88 | 33.43 | 3.72 | 224 | 30 | 11.0 | 33.08 | 4.70 | 25.30 | 268 | 0.09 |
| 74 | - | 33.66 | 3.19 | | 50 | 9.88 | 33.43 | 3.72 | 25.77 | 224 | 0.14 |
| 98 | 9.01 | 33.78 | 2.90 | 184 | 75 | 9.3 | 33.67 | 3.20 | 26.05 | 197 | 0.19 |
| 151 | 8.30 | 33.93 | 2.51 | 163 | 100 | 9.00 | 33.79 | 2.88 | 26.19 | 183 | 0.24 |
| 196 | 7.87 | 34.02 | 2.12 | 150 | 150 | 8.31 | 33.93 | 2.51 | 26.41 | 163 | 0.33 |
| 243 | 7.35 | 34.05 | 1.73 | 140 | 200 | 7.83 | 34.03 | 2.11 | 26.56 | 149 | 0.41 |
| 289 | 7.02 | 34.13 | 1.33 | 130 | 250 | 7.29 | 34.05 | 1.70 | 26.65 | 140 | 0.48 |
| 389 | 6.16 | 34.13 | 0.85 | 119 | 300 | 6.94 | 34.13 | 1.26 | 26.76 | 129 | 0.55 |
| 483 | 5.59 | - | 0.53 | | 400 | 6.07 | 34.13 | 0.82 | 26.88 | 118 | 0.68 |
| 588 | 5.10 | 34.33 | 0.37 | 92 | 500 | 5.50 | 34.24 | 0.48 | 27.04 | 103 | 0.79 |
| | | | | | 600 | (5.04) | (34.34) | | (27.17) | (91) | (0.90) |
| **70.55** | HORIZON; April 8, 1952; 1335 GCT; 36°03'N, 122°02'W; sounding, 700 fm; wind, 320°, force 4; weather, overcast; sea, confused; wire angle, 21°. | | | | | | | | | | |
| 0 | - | 33.30 | 6.63 | | 0 | 11.0 | 33.30 | 6.63 | 25.47 | 252 | 0.00 |
| 9 | 10.78 | 33.28 | 6.63 | 249 | 10 | 10.7 | 33.28 | 6.63 | 25.51 | 248 | 0.02 |
| 23 | - | 33.51 | 6.04 | | 20 | 10.6 | 33.39 | 6.43 | 25.61 | 238 | 0.05 |
| 47 | - | 33.69 | 4.86 | | 30 | 10.3 | 33.62 | 5.72 | 25.84 | 216 | 0.07 |
| 69 | - | 33.71 | 3.97 | | 50 | 9.7 | 33.69 | 4.74 | 26.00 | 202 | 0.11 |
| 91 | - | 33.77 | 2.91 | | 75 | 9.3 | 33.72 | 3.69 | 26.09 | 193 | 0.16 |
| 138 | 8.51 | 33.96 | 2.40 | 163 | 100 | 9.0 | 33.81 | 2.70 | 26.21 | 182 | 0.21 |
| 180 | - | 33.98 | 2.31 | | 150 | 8.35 | 33.97 | 2.35 | 26.43 | 160 | 0.30 |
| 221 | 7.71 | 34.07 | 1.82 | 144 | 200 | 7.86 | 34.00 | 2.17 | 26.53 | 151 | 0.38 |
| 263 | 7.46 | 34.11 | 1.46 | 138 | 250 | 7.55 | 34.11 | 1.56 | 26.66 | 139 | 0.45 |
| 349 | 6.65 | 34.13 | 1.03 | 125 | 300 | 7.10 | 34.11 | 1.25 | 26.73 | 133 | 0.52 |
| 433 | 6.09 | 34.22 | 0.70 | 112 | 400 | 6.30 | 34.18 | 0.82 | 26.89 | 117 | 0.65 |
| 520 | 5.52 | 34.23 | 0.44 | 104 | 500 | 5.64 | 34.23 | 0.50 | 27.01 | 106 | 0.77 |
| 696 | 4.56 | 34.38u | 0.29 | 82 | 600 | 5.00 | | 0.33 | | | |
| 875 | 4.09 | 34.38 | 0.40 | 78 | 700 | 4.54 | | 0.30 | | | |
| 1070 | 3.46 | 34.40 | 0.66 | 70 | 800 | 4.29 | | 0.33 | | | |
| | | | | | 1000 | 3.71 | | 0.56 | | | |
| **70.60** | HORIZON; April 8, 1952; 1732 GCT; 35°49'N, 122°24'W; sounding, 1800 fm; wind, 010°, force 3; weather, overcast; sea, rough; wire angle, 07°. | | | | | | | | | | |
| 0 | - | 32.92 | 6.43 | | 0 | 12.0 | 32.92 | 6.43 | 25.00 | 297 | 0.00 |
| 10 | 12.00 | 32.90 | 6.38 | 298 | 10 | 12.00 | 32.90 | 6.38 | 24.98 | 298 | 0.03 |
| 25 | - | 32.92 | 6.37 | | 20 | 11.9 | 32.91 | 6.38 | 25.01 | 296 | 0.06 |
| 50 | 11.44 | 32.95 | 6.42 | 285 | 30 | 11.7 | 32.93 | 6.39 | 25.06 | 291 | 0.09 |
| 74 | - | 33.21 | 4.86 | | 50 | 11.44 | 32.95 | 6.42 | 25.12 | 285 | 0.15 |
| 98 | 9.06 | 33.44 | 4.71 | 210 | 75 | 10.7 | 33.21 | 4.86 | 25.46 | 253 | 0.21 |
| 148 | 8.39 | 33.73 | 3.23 | 179 | 100 | 9.00 | 33.47 | 4.70 | 25.94 | 207 | 0.27 |
| 194 | 7.81 | 33.93 | 2.74 | 156 | 150 | 8.37 | 33.74 | 3.21 | 26.25 | 178 | 0.37 |
| 240 | 7.14 | 33.90 | 2.74 | 149 | 200 | 7.86 | 33.96 | 2.74 | 26.50 | 154 | 0.45 |
| 286 | 6.77 | 33.96 | 2.19 | 140 | 250 | 7.04 | 33.90 | 2.73 | 26.57 | 148 | 0.53 |
| 385 | 5.91 | 34.07 | 1.18 | 121 | 300 | 6.65 | 33.99 | 2.03 | 26.69 | 136 | 0.60 |
| 480 | 5.54 | 34.16 | 0.66 | 110 | 400 | 5.84 | 34.08 | 1.09 | 26.87 | 119 | 0.74 |
| 584 | 5.18 | 34.23 | 0.42 | 100 | 500 | 5.46 | 34.18 | 0.59 | 26.99 | 107 | 0.86 |
| | | | | | 600 | (5.12) | (34.23) | | (27.07) | (100) | (0.96) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

HORIZON; April 8, 1952; 2249 GCT; 35°31.5'N, 123°11'W; sounding, 2110 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 05°. 70.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 32.88 | 6.10 | | 0 | 12.7 | 32.88 | 6.10 | 24.83 | 313 | 0.00 |
| 10 | 12.55 | 32.92 | 6.14 | 307 | 10 | 12.55 | 32.92 | 6.14 | 24.89 | 307 | 0.03 |
| 25 | - | 32.94 | 6.12 | | 20 | 12.4 | 32.94 | 6.13 | 24.94 | 303 | 0.06 |
| 50 | - | 32.92 | 6.19 | | 30 | 12.3 | 32.93 | 6.13 | 24.95 | 302 | 0.09 |
| 74 | - | 32.94 | 6.11 | | 50 | 12.20 | 32.92 | 6.19 | 24.96 | 301 | 0.15 |
| 98 | - | 33.13 | 5.65 | | 75 | 11.7 | 32.94 | 6.12 | 25.07 | 290 | 0.23 |
| 151 | 9.17 | 33.40 | 4.20 | 215 | 100 | 10.7 | 33.16 | 5.58 | 25.42 | 257 | 0.30 |
| 196 | - | 33.78 | 3.25 | | 150 | 9.2 | 33.40 | 4.20 | 25.86 | 215 | 0.41 |
| 243 | 7.69 | 33.93 | 2.76 | 154 | 200 | 8.30 | 33.81 | 3.21 | 26.32 | 172 | 0.51 |
| 288 | 7.19 | 33.96 | 2.46 | 145 | 250 | 7.61 | 33.94 | 2.74 | 26.52 | 152 | 0.60 |
| 385 | 6.40 | 34.07 | 1.33 | 127 | 300 | 7.06 | 33.97 | 2.31 | 26.62 | 143 | 0.67 |
| 480 | 5.61 | 34.12 | 0.87 | 114 | 400 | 6.27 | 34.09 | 1.24 | 26.82 | 124 | 0.81 |
| 576 | 5.14 | 34.20 | 0.47 | 102 | 500 | 5.50 | 34.13 | 0.75 | 26.95 | 112 | 0.93 |
| 768 | 4.36 | 34.34 | 0.36 | 83 | 600 | 5.03 | 34.21 | 0.43 | 27.07 | 100 | 1.05 |
| 958 | 3.88 | 34.45 | 0.54 | 70 | 700 | 4.60 | 34.28 | 0.39 | 27.17 | 90 | 1.15 |
| 1160 | 3.38 | 34.36u | 0.72 | 72 | 800 | 4.26 | 34.38 | 0.39 | 27.29 | 79 | 1.24 |
| | | | | | 1000 | 3.77 | (34.45) | 0.60 | (27.39) | (69) | (1.40) |

HORIZON; April 9, 1952; 0022 GCT;[a] 35°31.5'N, 123°11'W; sounding, 2110 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 03°. 70.70

| | | | | |
|---|---|---|---|---|
| 0 | 12.67 | 32.97 | | 306 |
| 10 | - | 32.90 | | |
| 20 | - | 32.88 | | |
| 29 | - | 32.92 | | |
| 49 | - | 32.90 | | |
| 68 | 12.16 | 32.90 | | 301 |
| 86 | - | 32.95 | | |
| 105 | 10.12 | 32.99 | | 260 |
| 114 | 9.56 | 33.01 | | 250 |
| 123 | 9.16 | 33.20 | | 230 |
| 128 | 9.14 | 33.21 | | 228 |
| 132 | 9.08 | 33.31 | | 220 |
| 190 | 8.36 | 33.80 | | 173 |
| 237 | 7.69 | 33.96 | | 152 |
| 286 | 7.24 | 34.00 | | 143 |

HORIZON; April 9, 1952; 0508 GCT; 35°14'N, 123°48'W; sounding, 2250 fm; wind, 340°, force 1; weather, overcast; sea, moderate; wire angle, 08°. 70.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.06 | 6.16 | | 0 | 12.8 | 33.06 | 6.16 | 24.95 | 301 | 0.00 |
| 10 | 12.71 | 33.04 | 6.16 | 301 | 10 | 12.71 | 33.04 | 6.16 | 24.95 | 301 | 0.03 |
| 25 | - | 33.04 | 6.16 | | 20 | 12.6 | 33.04 | 6.15 | 24.97 | 299 | 0.06 |
| 50 | 12.24 | 33.03 | 6.14 | 293 | 30 | 12.5 | 33.04 | 6.15 | 24.99 | 297 | 0.09 |
| 75 | - | 33.10 | 5.75 | | 50 | 12.24 | 33.03 | 6.14 | 25.04 | 293 | 0.15 |
| 98 | 9.19 | 33.37 | 4.10 | 217 | 75 | 11.3 | 33.10 | 5.65 | 25.26 | 271 | 0.22 |
| 149 | 8.46 | 33.78 | 3.04 | 176 | 100 | 9.16 | 33.40 | 4.07 | 25.86 | 215 | 0.28 |
| 195 | 7.97 | 34.00 | 2.54 | 153 | 150 | 8.44 | 33.79 | 3.04 | 26.28 | 175 | 0.38 |
| 241 | 7.32 | 33.96 | 2.25 | 147 | 200 | 7.92 | 34.00 | 2.49 | 26.52 | 152 | 0.46 |
| 287 | 6.73 | 34.02 | 1.65 | 135 | 250 | 7.20 | 33.97 | 2.18 | 26.60 | 144 | 0.54 |
| 385 | 6.03 | 34.13 | 0.86 | 118 | 300 | 6.59 | 34.04 | 1.48 | 26.74 | 131 | 0.61 |
| 481 | 5.58 | 34.18 | 0.51 | 109 | 400 | 5.94 | 34.14 | 0.80 | 26.90 | 116 | 0.74 |
| 583 | 5.10 | 34.22 | 0.37 | 100 | 500 | 5.50 | 34.19 | 0.47 | 27.00 | 107 | 0.86 |
| | | | | | 600 | (5.01) | (34.23) | | (27.09) | (99) | (0.96) |

a) Bathythermograph calibration cast.

SIO
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5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **73.50** | HORIZON; April 4, 1952; 1724 GCT; 35°37'N, 121°16.5'W; sounding, 38 fm; wind, 310°, force 3; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 10.23 | 33.60 | 5.51 | 217 | 0 | 10.23 | 33.60 | 5.51 | 25.84 | 217 | 0.00 |
| 10 | 9.67 | 33.64 | 4.21 | 205 | 10 | 9.67 | 33.64 | 4.21 | 25.97 | 205 | 0.02 |
| 20 | 9.40 | 33.68 | 3.55 | 198 | 20 | 9.40 | 33.68 | 3.55 | 26.04 | 198 | 0.04 |
| 30 | 9.23 | 33.78 | 3.21 | 188 | 30 | 9.23 | 33.78 | 3.21 | 26.15 | 188 | 0.06 |
| 50 | - | 33.78 | 2.97 | | 50 | | 33.78 | 2.97 | | | |
| **77.50** | HORIZON; April 4, 1952; 0829 GCT; 35°04.5'N, 120°52'W; sounding, 65 fm; wind, 310°, force 1; weather, clear; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | 10.17 | 33.57 | 4.83 | 218 | 0 | 10.17 | 33.57 | 4.83 | 25.83 | 218 | 0.00 |
| 12 | 10.18 | 33.62 | 4.77 | 214 | 10 | 10.18 | 33.62 | 4.77 | 25.87 | 214 | 0.02 |
| 22 | 10.15 | 33.57 | 4.72 | 218 | 20 | 10.17 | 33.57 | 4.74 | 25.83 | 218 | 0.04 |
| 32 | 10.05 | 33.62 | 4.58 | 212 | 30 | 10.11 | 33.61 | 4.65 | 25.87 | 214 | 0.06 |
| 58 | - | 33.60 | - | | 50 | 9.6 | 33.61 | 3.96 | 25.95 | 206 | 0.11 |
| 85 | 9.02 | 33.77 | 2.51 | 185 | 75 | 9.1 | 33.71 | 2.84 | 26.11 | 191 | 0.16 |
| 111 | 8.87 | 33.87 | 2.33 | 175 | 100 | 8.92 | 33.83 | 2.38 | 26.24 | 179 | 0.20 |
| **80.51** | HORIZON; April 11, 1952; 0555 GCT; 34°26.5'N, 120°32.5'W; sounding, 48 fm; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 12.46 | 33.33 | 6.12 | 275 | 0 | 12.46 | 33.33 | 6.12 | 25.23 | 275 | 0.00 |
| 10 | 12.50 | 33.30 | 6.14 | 278 | 10 | 12.50 | 33.30 | 6.14 | 25.20 | 278 | 0.03 |
| 20 | 12.51 | 33.33 | 6.14 | 276 | 20 | 12.51 | 33.33 | 6.14 | 25.22 | 276 | 0.06 |
| 30 | 12.28 | 33.30 | 6.22 | 274 | 30 | 12.28 | 33.30 | 6.22 | 25.24 | 274 | 0.08 |
| 50 | - | 33.44 | 4.64 | | 50 | 10.44 | 33.44 | 4.64 | 25.68 | 232 | 0.13 |
| 75 | 9.70 | 33.62 | 3.44 | 207 | 75 | 9.70 | 33.62 | 3.44 | 25.95 | 207 | 0.19 |
| **80.55** | HORIZON; April 11, 1952; 0323 GCT; 34°19.5'N, 120°47.5'W; sounding, 405 fm; wind, 320°, force 4; weather, partly cloudy; sea, slight; wire angle, 18°. | | | | | | | | | | |
| 0 | - | 33.12 | 6.26 | | 0 | 12.8 | 33.12 | 6.26 | 25.00 | 297 | 0.00 |
| 9 | 12.76 | 33.10 | 6.30 | 298 | 10 | 12.8 | 33.10 | 6.30 | 24.98 | 298 | 0.03 |
| 23 | - | 33.15 | 6.21 | | 20 | 12.2 | 33.13 | 6.23 | 25.12 | 285 | 0.06 |
| 47 | 11.76 | 33.17 | 6.03 | 274 | 30 | 12.0 | 33.16 | 6.19 | 25.18 | 279 | 0.09 |
| 71 | - | 33.31 | 4.38 | | 50 | 11.7 | 33.17 | 5.92 | 25.25 | 273 | 0.14 |
| 94 | 9.13 | 33.44 | 3.99 | 211 | 75 | 9.6 | 33.35 | 4.29 | 25.75 | 225 | 0.21 |
| 141 | 8.44 | 33.80 | 3.04 | 174 | 100 | 9.05 | 33.51 | 3.88 | 25.97 | 205 | 0.26 |
| 185 | - | 33.95 | 2.79 | | 150 | 8.33 | 33.85 | 2.99 | 26.34 | 169 | 0.35 |
| 229 | 7.39 | 34.00 | 2.37 | 145 | 200 | 7.71 | 33.97 | 2.62 | 26.53 | 151 | 0.44 |
| 273 | 6.96 | 34.03 | 2.00 | 137 | 250 | 7.18 | 34.01 | 2.24 | 26.64 | 141 | 0.51 |
| 366 | 6.14 | 34.09 | 1.08 | 122 | 300 | 6.70 | 34.05 | 1.71 | 26.73 | 132 | 0.58 |
| 459 | 5.77 | 34.20 | 0.53 | 109 | 400 | 5.96 | 34.12 | 0.82 | 26.88 | 118 | 0.71 |
| 561 | 5.40 | 34.25 | 0.34 | 101 | 500 | 5.61 | 34.24 | 0.44 | 27.02 | 105 | 0.83 |
| **80.60** | HORIZON; April 10, 1952; 2354 GCT; 34°08'N, 121°09.5'W; sounding, 1250 fm; wind, 300°, force 3; weather, cloudy; sea, slight; wire angle, 12°. | | | | | | | | | | |
| 0 | - | 33.08 | 6.16 | | 0 | 13.1 | 33.08 | 6.16 | 24.91 | 305 | 0.00 |
| 10 | 12.89 | 33.06 | 6.18 | 303 | 10 | 12.89 | 33.06 | 6.18 | 24.93 | 303 | 0.03 |
| 25 | - | 33.13 | 6.15 | | 20 | 12.5 | 33.08 | 6.16 | 25.03 | 294 | 0.06 |
| 49 | - | 33.12 | 5.70 | | 30 | 12.8 | 33.13 | 6.12 | 25.01 | 296 | 0.09 |
| 73 | - | 33.28 | 4.41 | | 50 | 11.2 | 33.12 | 5.66 | 25.30 | 268 | 0.15 |
| 97 | - | 33.49 | 3.71 | | 75 | 9.9 | 33.31 | 4.32 | 25.67 | 233 | 0.21 |
| 148 | 8.59 | 33.68 | 3.33 | 185 | 100 | 9.8 | 33.51 | 3.68 | 25.84 | 216 | 0.27 |
| 194 | - | 33.98 | 2.35 | | 150 | 8.56 | 33.69 | 3.32 | 26.18 | 184 | 0.37 |
| 241 | 7.63 | 34.04 | 2.22 | 145 | 200 | 8.26 | 33.99 | 2.31 | 26.46 | 158 | 0.45 |
| 285 | 7.31 | 34.13 | 1.44 | 134 | 250 | 7.58 | 34.05 | 2.16 | 26.61 | 144 | 0.53 |
| 382 | 6.09 | 34.09 | 1.05 | 121 | 300 | 7.16 | 34.13 | 1.38 | 26.73 | 132 | 0.60 |
| 475 | 5.54 | 34.18 | 0.54 | 108 | 400 | 5.98 | 34.09 | 0.95 | 26.86 | 120 | 0.73 |
| 575 | 4.98 | 34.25 | 0.33 | 97 | 500 | 5.39 | 34.19 | 0.46 | 27.01 | 106 | 0.85 |
| 766 | 4.32 | 34.43 | 0.28 | 76 | 600 | 4.87 | 34.28 | 0.32 | 27.14 | 93 | 0.96 |
| 956 | 3.92 | 34.42 | 0.52 | 73 | 700 | 4.50 | 34.40 | 0.28 | 27.28 | 80 | 1.05 |
| 1157 | 3.37 | 34.47 | 0.71 | 64 | 800 | 4.24 | 34.43 | 0.29 | 27.33 | 75 | 1.14 |
| | | | | | 1000 | 3.82 | 34.43 | 0.60 | 27.37 | 71 | 1.30 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| HORIZON; April 10, 1952; 1817 GCT; 33°51'N, 121°50.5'W; sounding, 2000 fm; wind, 360°, force 3; weather, rain showers; sea, slight; wire angle, 02°. | | | | | | | | | | | 80.70 |
| 0 | - | 33.01 | 5.99 | | 0 | 13.4 | 33.01 | 5.99 | 24.79 | 316 | 0.00 |
| 10 | 13.29 | 33.01 | 6.01 | 314 | 10 | 13.29 | 33.01 | 6.01 | 24.82 | 314 | 0.03 |
| 25 | - | 33.01 | 6.05 | | 20 | 13.1 | 33.01 | 6.04 | 24.85 | 311 | 0.06 |
| 50 | 12.75 | 33.04 | 5.97 | 302 | 30 | 12.9 | 33.01 | 6.04 | 24.89 | 307 | 0.09 |
| 74 | - | 33.12 | 5.42 | | 50 | 12.75 | 33.04 | 5.97 | 24.95 | 302 | 0.15 |
| 98 | 9.77 | 33.24 | 4.51 | 236 | 75 | 11.7 | 33.12 | 5.42 | 25.21 | 277 | 0.23 |
| 149 | 8.80 | 33.78 | 3.11 | 181 | 100 | 9.72 | 33.26 | 4.43 | 25.66 | 234 | 0.29 |
| 194 | 8.50 | 33.98 | 2.44 | 162 | 150 | 8.79 | 33.80 | 3.10 | 26.23 | 179 | 0.40 |
| 240 | 7.84 | 34.05 | 2.05 | 147 | 200 | 8.44 | 33.99 | 2.39 | 26.44 | 160 | 0.48 |
| 285 | 7.28 | 34.05 | 1.72 | 140 | 250 | 7.71 | 34.05 | 2.00 | 26.59 | 145 | 0.56 |
| 383 | 6.51 | 34.14 | 0.90 | 123 | 300 | 7.12 | 34.05 | 1.60 | 26.68 | 137 | 0.63 |
| 478 | 5.98 | 34.20 | 0.56 | 112 | 400 | 6.40 | 34.16 | 0.82 | 26.86 | 120 | 0.77 |
| 583 | 5.44 | 34.25 | 0.36 | 102 | 500 | 5.86 | 34.21 | 0.51 | 26.97 | 110 | 0.89 |
| | | | | | 600 | (5.37) | (34.26) | | (27.07) | (100) | (1.00) |
| HORIZON; April 10, 1952; 1210 GCT; 33°30'N, 122°31'W; sounding, 2400 fm; wind, 360°, force 3; weather, light drizzle; sea, rough; wire angle, 09°. | | | | | | | | | | | 80.80 |
| 0 | - | 33.01 | 6.06 | | 0 | 13.6 | 33.01 | 6.06 | 24.75 | 320 | 0.00 |
| 10 | 13.34 | 33.06 | 6.13 | 311 | 10 | 13.34 | 33.06 | 6.13 | 24.84 | 311 | 0.03 |
| 24 | - | 33.04 | 6.20 | | 20 | 13.1 | 33.04 | 6.19 | 24.88 | 308 | 0.06 |
| 49 | - | 33.04 | 6.06 | | 30 | 12.8 | 33.03 | 6.20 | 24.93 | 303 | 0.09 |
| 73 | - | 33.22 | 4.84 | | 50 | 12.8 | 33.04 | 6.04 | 24.94 | 303 | 0.15 |
| 97 | - | 33.46 | 4.00 | | 75 | 12.1 | 33.27 | 4.77 | 25.25 | 273 | 0.23 |
| 149 | 9.45 | 33.82 | 2.86 | 188 | 100 | 10.5 | 33.49 | 3.92 | 25.71 | 229 | 0.29 |
| 196 | - | 33.96 | 2.40 | | 150 | 9.44 | 33.82 | 2.86 | 26.14 | 188 | 0.40 |
| 242 | 8.38 | 34.07 | 1.94 | 153 | 200 | 8.98 | 33.97 | 2.36 | 26.34 | 170 | 0.49 |
| 288 | 7.93 | 34.13 | 1.54 | 143 | 250 | 8.30 | 34.09 | 1.88 | 26.54 | 151 | 0.57 |
| 384 | 7.02 | 34.14 | 0.97 | 129 | 300 | 7.80 | 34.13 | 1.43 | 26.64 | 141 | 0.64 |
| 477 | 6.22 | 34.22 | 0.68 | 113 | 400 | 6.86 | 34.15 | 0.90 | 26.79 | 127 | 0.78 |
| 575 | 5.72 | 34.29 | 0.40 | 102 | 500 | 6.10 | 34.23 | 0.59 | 26.95 | 111 | 0.91 |
| 766 | 4.72 | 34.40 | 0.37 | 83 | 600 | 5.57 | 34.31 | 0.39 | 27.08 | 99 | 1.02 |
| 956 | 4.13 | 34.43 | 0.54 | 74 | 700 | 5.01 | 34.37 | 0.37 | 27.20 | 88 | 1.12 |
| 1158 | 3.54 | 34.47 | 0.80 | 66 | 800 | 4.59 | 34.41 | 0.39 | 27.28 | 81 | 1.21 |
| | | | | | 1000 | 4.01 | 34.44 | 0.59 | 27.36 | 72 | 1.38 |
| HORIZON; April 10, 1952; 0642 GCT; 33°08'N, 123°12.5'W; sounding, 2350 fm; wind, 050°, force 4; weather, moderate drizzle; sea, rough; wire angle, 15°. | | | | | | | | | | | 80.90 |
| 0 | - | 33.01 | 6.12 | | 0 | 13.4 | 33.01 | 6.12 | 24.79 | 316 | 0.00 |
| 10 | 13.36 | 33.08 | 6.25 | 310 | 10 | 13.36 | 33.08 | 6.25 | 24.86 | 310 | 0.03 |
| 24 | - | 33.15 | 6.26 | | 20 | 13.2 | 33.13 | 6.26 | 24.93 | 304 | 0.06 |
| 48 | 12.71 | 33.21 | 6.11 | 289 | 30 | 12.8 | 33.17 | 6.25 | 25.04 | 293 | 0.09 |
| 72 | - | 33.22 | 5.99 | | 50 | 12.7 | 33.21 | 6.10 | 25.09 | 288 | 0.15 |
| 95 | 10.04 | 33.19 | 4.73 | 244 | 75 | 12.6 | 33.22 | 5.96 | 25.11 | 286 | 0.22 |
| 144 | 9.20 | 33.71 | 3.23 | 192 | 100 | 9.91 | 33.19 | 4.54 | 25.58 | 242 | 0.29 |
| 190 | - | 33.95 | 2.74 | | 150 | 9.09 | 33.75 | 3.12 | 26.15 | 188 | 0.40 |
| 235 | 7.66 | 34.00 | 2.40 | 148 | 200 | 8.17 | 33.97 | 2.69 | 26.46 | 158 | 0.49 |
| 280 | 7.24 | 34.05 | 1.75 | 139 | 250 | 7.50 | 34.01 | 2.21 | 26.59 | 146 | 0.56 |
| 378 | 6.64 | 34.16 | 0.84 | 123 | 300 | 7.13 | 34.09 | 1.49 | 26.71 | 135 | 0.64 |
| 471 | 5.78 | 34.18 | 0.66 | 111 | 400 | 6.42 | 34.17 | 0.77 | 26.86 | 120 | 0.77 |
| 573 | 5.14 | 34.23 | 0.45 | 100 | 500 | 5.58 | 34.19 | 0.60 | 26.99 | 108 | 0.89 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **83.55** | HORIZON; April 11, 1952; 1110 GCT; 33°44'N, 120°24'W; sounding, 500 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 18°. | | | | | | | | | | |
| 0 | - | 33.24 | 6.35 | | 0 | 12.3 | 33.24 | 6.35 | 25.19 | 279 | 0.00 |
| 10 | 12.20 | 33.24 | 6.25 | 277 | 10 | 12.20 | 33.24 | 6.25 | 25.21 | 277 | 0.03 |
| 24 | - | 33.29 | 6.16 | | 20 | 12.0 | 33.26 | 6.19 | 25.26 | 272 | 0.06 |
| 52 | 9.73 | 33.48 | 4.11 | 218 | 30 | 11.6 | 33.32 | 6.01 | 25.38 | 260 | 0.08 |
| 76 | - | 33.68 | 3.27 | | 50 | 9.9 | 33.47 | 4.50 | 25.80 | 221 | 0.13 |
| 102 | 9.04 | 33.84 | 2.84 | 180 | 75 | 9.3 | 33.68 | 3.28 | 26.06 | 196 | 0.18 |
| 150 | 8.52 | 34.04 | 2.05 | 158 | 100 | 9.1 | 33.83 | 2.92 | 26.21 | 182 | 0.23 |
| | | | | | 150 | 8.52 | 34.04 | 2.05 | 26.46 | 158 | 0.32 |
| **83.60** | HORIZON; April 11, 1952; 1426, 1449 GCT; 33°33.5'N, 120°44.5'W; sounding, 700 fm; wind, 320°, force 6; weather, overcast; sea, very rough; wire angle, 28°, 35°. | | | | | | | | | | |
| 0 | - | 33.26 | 6.24 | | 0 | 12.7 | 33.26 | 6.24 | 25.13 | 285 | 0.00 |
| 8 | 12.64 | 33.30 | 6.23 | 281 | 10 | 12.6 | 33.31 | 6.22 | 25.18 | 279 | 0.03 |
| 22 | - | 33.37 | 6.02 | | 20 | 12.4 | 33.37 | 6.07 | 25.27 | 271 | 0.06 |
| 48 | 11.62 | 33.30 | 5.58 | 262 | 30 | 12.3 | 33.35 | 5.90 | 25.27 | 271 | 0.08 |
| 70 | - | 33.44 | 4.41 | | 50 | 11.6 | 33.30 | 5.46 | 25.36 | 262 | 0.14 |
| 94 | 9.74 | 33.71 | 3.36 | 201 | 75 | 10.3 | 33.52 | 4.19 | 25.77 | 224 | 0.20 |
| 133 | 9.10 | 33.93 | 2.46 | 174 | 100 | 9.62 | 33.77 | 3.16 | 26.08 | 194 | 0.25 |
| 170 | 8.60 | 34.00 | 2.10 | 162 | 150 | 8.88 | 33.97 | 2.24 | 26.35 | 168 | 0.34 |
| | | | | | 200 | 8.13 | 34.00 | 2.20 | 26.49 | 155 | 0.42 |
| 206 | 8.02 | 34.00 | 2.22 | 153 | 250 | 7.19 | 33.99 | 2.28 | 26.62 | 143 | 0.50 |
| 247 | 7.25 | - | 2.29 | | 300 | 6.87 | 33.98 | 1.82 | 26.65 | 139 | 0.57 |
| 345 | 6.70 | 33.98 | 1.33 | 137 | 400 | 6.59 | 34.11 | 0.88 | 26.79 | 126 | 0.71 |
| 443 | 6.43 | 34.23 | 0.65 | 115 | 500 | 6.13 | 34.23 | 0.52 | 26.95 | 111 | 0.84 |
| 548 | 5.78 | 34.23 | 0.46 | 107 | | | | | | | |
| **83.70** | HORIZON; April 11, 1952; 2052 GCT; 33°16'N, 121°27.5'W; sounding, 1900 fm; wind, 310°, force 6; weather, overcast; sea, very rough; wire angle, 22°. | | | | | | | | | | |
| 0 | - | 33.13 | 6.16 | | 0 | 13.0 | 33.13 | 6.16 | 24.97 | 300 | 0.00 |
| 9 | 12.95 | 33.13 | 6.18 | 299 | 10 | 12.9 | 33.13 | 6.18 | 24.99 | 298 | 0.03 |
| 28 | - | 33.10 | 6.14 | | 20 | 12.9 | 33.11 | 6.16 | 24.97 | 299 | 0.06 |
| 56 | 11.92 | 33.13 | 5.98 | 280 | 30 | 12.9 | 33.10 | 6.12 | 24.96 | 300 | 0.09 |
| 83 | - | 33.33 | 5.64 | | 50 | 12.1 | 33.11 | 6.00 | 25.12 | 285 | 0.15 |
| 109 | 9.72 | 33.50 | 3.79 | 216 | 75 | 11.5 | 33.25 | 5.80 | 25.34 | 264 | 0.22 |
| 158 | 8.73 | 33.87 | 2.66 | 173 | 100 | 10.1 | 33.44 | 4.79 | 25.74 | 226 | 0.28 |
| 205 | 8.34 | 34.03 | 2.04 | 156 | 150 | 8.84 | 33.81 | 2.82 | 26.23 | 179 | 0.38 |
| | | | | | 200 | 8.37 | 34.02 | 2.09 | 26.47 | 157 | 0.47 |
| **83.80** | HORIZON; April 12, 1952; 0230 GCT; 32°55'N, 122°06'W; sounding, 2000 fm; wind, 310°, force 5; weather, overcast; sea, very rough; wire angle, 20°. | | | | | | | | | | |
| 0 | - | 33.06 | 6.00 | | 0 | 13.4 | 33.06 | 6.00 | 24.83 | 313 | 0.00 |
| 9 | 13.47 | 33.04 | 6.02 | 315 | 10 | 13.5 | 33.04 | 6.02 | 24.80 | 316 | 0.03 |
| 24 | - | 33.06 | 6.00 | | 20 | 13.5 | 33.05 | 6.00 | 24.80 | 315 | 0.06 |
| 52 | 12.92 | 33.12 | 5.16 | 299 | 30 | 13.5 | 33.08 | 6.00 | 24.83 | 313 | 0.09 |
| 74 | - | 33.08 | 5.28 | | 50 | 13.0 | 33.12 | 5.18 | 24.96 | 301 | 0.16 |
| 100 | 9.95 | 33.37 | 4.10 | 229 | 75 | 11.5 | 33.08 | 5.26 | 25.21 | 276 | 0.23 |
| 148 | 8.56 | 33.78 | 3.45 | 178 | 100 | 9.95 | 33.37 | 4.10 | 25.71 | 229 | 0.29 |
| 192 | 8.12 | 33.95 | 2.46 | 159 | 150 | 8.54 | 33.79 | 3.40 | 26.26 | 177 | 0.39 |
| | | | | | 200 | (8.04) | (33.97) | (2.36) | (26.48) | (156) | (0.48) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| HORIZON; April 12, 1952; 1055 GCT; 32°36.5'N, 122°47'W; sounding, 2200 fm; wind, 310°, force 2; weather, overcast; sea, rough; wire angle, 08°. | | | | | | | | | | | 83.90 |
| 0 | - | 33.06 | 6.02 | | 0 | 13.6 | 33.06 | 6.02 | 24.79 | 316 | 0.00 |
| 10 | 13.58 | 33.08 | 6.10 | 315 | 10 | 13.58 | 33.08 | 6.10 | 24.81 | 315 | 0.03 |
| 25 | - | 33.04 | 5.95 | | 20 | 13.6 | 33.06 | 6.03 | 24.79 | 316 | 0.06 |
| 54 | 13.12 | 33.19 | 5.67 | 298 | 30 | 13.6 | 33.04 | 5.90 | 24.78 | 318 | 0.09 |
| 79 | - | 33.15 | 5.16 | | 50 | 13.2 | 33.19 | 5.71 | 24.97 | 299 | 0.16 |
| 108 | 9.37 | 33.44 | 3.71 | 215 | 75 | 12.0 | 33.15 | 5.37 | 25.17 | 280 | 0.23 |
| 158 | 8.47 | 33.82 | 2.68 | 173 | 100 | 9.8 | 33.24 | 4.05 | 25.63 | 236 | 0.29 |
| 209 | 8.01 | 34.02 | 2.09 | 152 | 150 | 8.54 | 33.79 | 2.80 | 26.26 | 177 | 0.40 |
| 264 | 7.31 | 34.04 | 1.62 | 141 | 200 | 8.09 | 34.00 | 2.18 | 26.50 | 154 | 0.48 |
| 310 | 6.78 | 34.07 | 1.26 | 132 | 250 | 7.51 | 34.03 | 1.74 | 26.60 | 144 | 0.56 |
| 418 | 6.27 | 34.18 | 0.57 | 117 | 300 | 6.90 | 34.06 | 1.34 | 26.71 | 134 | 0.63 |
| 523 | 5.52 | 34.23 | 0.41 | 104 | 400 | 6.35 | 34.17 | 0.61 | 26.87 | 119 | 0.76 |
| 632 | 5.10 | 34.29 | 0.29 | 95 | 500 | 5.64 | 34.21 | 0.45 | 27.00 | 107 | 0.88 |
| | | | | | 600 | 5.21 | 34.27 | 0.32 | 27.09 | 98 | 0.99 |
| HORIZON; April 13, 1952; 2253 GCT; 33°50'N, 118°37.5'W; sounding, 325 fm; wind, 260°, force 4; weather, cloudy; sea, slight; wire angle, 10°. | | | | | | | | | | | 87.35 |
| 0 | 14.57 | 33.30 | 6.18 | 318 | 0 | 14.57 | 33.30 | 6.18 | 24.78 | 318 | 0.00 |
| 10 | 14.51 | 33.30 | 6.18 | 317 | 10 | 14.51 | 33.30 | 6.18 | 24.79 | 317 | 0.03 |
| 25 | - | 33.30 | 6.53 | | 20 | 13.5 | 33.30 | 6.49 | 25.00 | 297 | 0.06 |
| 51 | 11.15 | 33.37 | 4.89 | 249 | 30 | 12.8 | 33.31 | 6.53 | 25.14 | 283 | 0.09 |
| 75 | 10.02 | 33.53 | 3.86 | 218 | 50 | 11.2 | 33.37 | 4.98 | 25.49 | 250 | 0.14 |
| 98 | 9.68 | 33.75 | 3.19 | 197 | 75 | 10.02 | 33.53 | 3.86 | 25.82 | 218 | 0.20 |
| 193 | 8.69 | 34.13 | 1.85 | 153 | 100 | 9.64 | 33.75 | 3.19 | 26.06 | 196 | 0.26 |
| 240 | 8.24 | 34.17 | 1.52 | 144 | 150 | 8.98 | 33.75 | 2.81 | 26.16 | 186 | 0.35 |
| | | | | | 200 | 8.64 | 34.14 | 1.80 | 26.52 | 152 | 0.44 |
| | | | | | 250 | (8.14) | (34.17) | (1.48) | (26.62) | (143) | (0.51) |
| HORIZON; April 13, 1952; 1930, 2004 GCT; 33°40.5'N, 118°59'W; sounding, 480 fm; wind, 280°, force 4; weather, overcast; sea, moderate; wire angle, 15°, 18°. | | | | | | | | | | | 87.40 |
| 0 | - | 33.30 | 5.97 | | 0 | 14.3 | 33.30 | 5.97 | 24.83 | 313 | 0.00 |
| 9 | 14.29 | 33.26 | 6.19 | 315 | 10 | 14.3 | 33.26 | 6.23 | 24.80 | 316 | 0.03 |
| 23 | - | 33.31 | 6.36 | | 20 | 13.8 | 33.28 | 6.36 | 24.92 | 304 | 0.06 |
| 48 | 10.62 | 33.49 | 4.39 | 231 | 30 | 12.3 | 33.37 | 6.25 | 25.29 | 269 | 0.09 |
| 71 | - | 33.60 | 3.69 | | 50 | 10.6 | 33.50 | 4.35 | 25.70 | 230 | 0.14 |
| 95 | 9.31 | 33.86 | 2.83 | 183 | 75 | 9.9 | 33.65 | 3.55 | 25.94 | 208 | 0.20 |
| 145 | 8.85 | 34.09 | 2.08 | 159 | 100 | 9.22 | 33.91 | 2.72 | 26.25 | 178 | 0.24 |
| 189 | 8.54 | 34.14 | 1.65 | 151 | 150 | 8.82 | 34.10 | 2.02 | 26.46 | 158 | 0.33 |
| 232 | 8.10 | 34.16 | 1.35 | 143 | 200 | 8.44 | 34.15 | 1.56 | 26.56 | 148 | 0.41 |
| 466 | 6.45 | 34.25 | 0.43 | 114 | | | | | | | |
| 567 | 5.62 | 34.33 | 0.30 | 98 | | | | | | | |
| HORIZON; April 13, 1952; 1525 GCT; 33°20.5'N, 119°39.5'W; sounding, 40 fm; wind, 260°, force 3; weather, overcast; sea, moderate; wire angle, 01°. | | | | | | | | | | | 87.50 |
| 0 | 13.21 | 33.17 | 6.07 | 301 | 0 | 13.21 | 33.17 | 6.07 | 24.96 | 301 | 0.00 |
| 10 | 13.20 | 33.19 | 6.01 | 299 | 10 | 13.20 | 33.19 | 6.01 | 24.97 | 299 | 0.03 |
| 20 | 13.13 | 33.19 | 6.06 | 298 | 20 | 13.13 | 33.19 | 6.06 | 24.99 | 298 | 0.06 |
| 30 | 12.72 | 33.17 | 6.10 | 292 | 30 | 12.72 | 33.17 | 6.10 | 25.05 | 292 | 0.09 |
| 50 | - | 33.22 | 5.38 | | 50 | | 33.22 | 5.38 | | | |

SIO

CCOFI
5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| 87.60 | HORIZON; April 13, 1952; 0913 GCT; 32°55'N, 120°17.5'W; sounding, 363 fm; wind, 320°, force 3; weather, overcast; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | - | 33.12 | 5.95 | | 0 | 13.6 | 33.12 | 5.95 | 24.84 | 312 | 0.00 |
| 10 | 13.59 | 33.06 | 5.93 | 316 | 10 | 13.59 | 33.06 | 5.93 | 24.79 | 316 | 0.03 |
| 25 | - | 33.17 | 6.08 | | 20 | 13.5 | 33.13 | 6.05 | 24.87 | 309 | 0.06 |
| 50 | 12.04 | 33.21 | 5.71 | 276 | 30 | 13.2 | 33.19 | 6.06 | 24.97 | 299 | 0.09 |
| 75 | - | 33.44 | 4.05 | | 50 | 12.04 | 33.21 | 5.71 | 25.21 | 276 | 0.15 |
| 98 | 9.06 | 33.49 | 3.90 | 206 | 75 | 9.9 | 33.44 | 4.05 | 25.77 | 223 | 0.21 |
| 150 | 8.51 | 33.87 | 2.76 | 170 | 100 | 9.02 | 33.50 | 3.88 | 25.96 | 205 | 0.27 |
| 196 | 8.13 | 34.04 | 2.22 | 152 | 150 | 8.51 | 33.87 | 2.76 | 26.33 | 170 | 0.36 |
| 242 | 7.48 | 34.04 | 2.13 | 143 | 200 | 8.09 | 34.05 | 2.22 | 26.54 | 151 | 0.44 |
| 288 | 7.09 | 34.04 | 1.47 | 138 | 250 | 7.40 | 34.04 | 2.06 | 26.63 | 142 | 0.52 |
| 386 | 6.28 | 34.15 | 0.82 | 119 | 300 | 7.00 | 34.05 | 1.39 | 26.69 | 136 | 0.59 |
| 481 | 5.74 | 34.23 | 0.46 | 107 | 400 | 6.18 | 34.17 | 0.76 | 26.90 | 117 | 0.72 |
| 585 | 5.32 | 34.29 | 0.34 | 97 | 500 | 5.66 | 34.24 | 0.43 | 27.02 | 105 | 0.84 |
| | | | | | 600 | (5.26) | (34.30) | | (27.11) | (96) | (0.95) |
| 87.60 | HORIZON; April 13, 1952; 1039 GCT;[a] 32°55'N, 120°17.5'W; sounding, 363 fm; wind, 320°, force 3; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 13.61 | 33.08 | | 315 | | | | | | | |
| 20 | 13.62 | 33.10 | | 314 | | | | | | | |
| 50 | 11.94 | 33.17 | | 278 | | | | | | | |
| 88 | 9.37 | 33.35 | | 222 | | | | | | | |
| 107 | 8.90 | 33.62 | | 194 | | | | | | | |
| 125 | 8.78 | 33.78 | | 181 | | | | | | | |
| 134 | 8.65 | 33.82 | | 176 | | | | | | | |
| 190 | 8.13 | 33.98 | | 156 | | | | | | | |
| 238 | 7.52 | 34.04 | | 144 | | | | | | | |
| 287 | 7.18 | 34.07 | | 137 | | | | | | | |
| 87.70 | HORIZON; April 13, 1952; 0355 GCT; 32°37'N, 121°02'W; sounding, 2000 fm; wind, 290°, force 2; weather, overcast; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | - | 33.21 | 5.79 | | 0 | 14.3 | 33.21 | 5.79 | 24.76 | 319 | 0.00 |
| 10 | 14.33 | 33.17 | 5.76 | 323 | 10 | 14.33 | 33.17 | 5.76 | 24.73 | 323 | 0.03 |
| 25 | - | 33.15 | 5.86 | | 20 | 14.3 | 33.15 | 5.81 | 24.72 | 324 | 0.06 |
| 51 | 12.74 | 33.08 | 5.91 | 299 | 30 | 14.2 | 33.14 | 5.88 | 24.73 | 322 | 0.10 |
| 75 | - | 33.10 | 5.48 | | 50 | 12.8 | 33.08 | 5.91 | 24.97 | 300 | 0.16 |
| 99 | 9.68 | 33.24 | 4.81 | 235 | 75 | 11.1 | 33.10 | 5.48 | 25.30 | 268 | 0.23 |
| 150 | 8.88 | 33.66 | 3.52 | 191 | 100 | 9.65 | 33.24 | 4.81 | 25.66 | 234 | 0.29 |
| 196 | - | 33.89 | 3.15 | | 150 | 8.88 | 33.66 | 3.52 | 26.11 | 191 | 0.40 |
| 241 | 7.77 | 33.96 | 2.89 | 153 | 200 | 8.33 | 33.91 | 3.13 | 26.39 | 165 | 0.49 |
| 287 | 7.21 | 34.00 | 2.30 | 142 | 250 | 7.65 | 33.97 | 2.81 | 26.54 | 151 | 0.57 |
| 384 | 6.48 | 34.11 | 1.06 | 125 | 300 | 7.08 | 34.01 | 2.09 | 26.65 | 140 | 0.65 |
| 480 | 5.66 | 34.16 | 0.67 | 111 | 400 | 6.33 | 34.12 | 0.97 | 26.84 | 122 | 0.78 |
| 583 | 5.26 | 34.27 | 0.36 | 98 | 500 | 5.56 | 34.17 | 0.59 | 26.97 | 109 | 0.90 |
| | | | | | 600 | (5.20) | (34.28) | | (27.10) | (97) | (1.01) |
| 87.80 | HORIZON; April 12, 1952; 2039 GCT; 32°19.5'N, 121°43.5'W; sounding, 2250 fm; wind, 270°, force 3; weather, overcast; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | - | 33.31 | 5.72 | | 0 | 14.8 | 33.31 | 5.72 | 24.73 | 322 | 0.00 |
| 10 | 14.76 | 33.31 | 5.70 | 321 | 10 | 14.76 | 33.31 | 5.70 | 24.74 | 321 | 0.03 |
| 25 | - | 33.31 | 5.72 | | 20 | 14.8 | 33.31 | 5.72 | 24.73 | 322 | 0.06 |
| 49 | 14.28 | 33.22 | 5.50 | 318 | 30 | 14.6 | 33.31 | 5.68 | 24.78 | 318 | 0.10 |
| 73 | - | 33.04 | 5.94 | | 50 | 14.2 | 33.22 | 5.50 | 24.79 | 316 | 0.16 |
| 97 | 11.97 | 33.15 | 5.62 | 280 | 75 | 12.7 | 33.04 | 5.94 | 24.96 | 301 | 0.24 |
| 147 | 9.35 | 33.37 | 4.34 | 220 | 100 | 11.78 | 33.17 | 5.55 | 25.23 | 275 | 0.31 |
| 191 | 8.69 | 33.77 | 3.65 | 180 | 150 | 9.31 | 33.39 | 4.30 | 25.83 | 218 | 0.43 |
| 235 | 8.03 | 33.96 | 3.06 | 157 | 200 | 8.56 | 33.83 | 3.53 | 26.29 | 174 | 0.53 |

a) Bathythermograph calibration cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| HORIZON; April 12, 1952; 1624 GCT; 32°02'N, 122°23.5'W; sounding, 2050 fm; wind, 270°, force 3; weather, overcast; sea, rough; wire angle, 07°. | | | | | | | | | | | 87.90 |
| 0 | - | 33.04 | 5.92 | | 0 | 13.6 | 33.04 | 5.92 | 24.78 | 318 | 0.00 |
| 10 | 13.52 | 33.08 | 5.92 | 313 | 10 | 13.52 | 33.08 | 5.92 | 24.82 | 313 | 0.03 |
| 25 | - | 33.05 | 5.99 | | 20 | 13.5 | 33.05 | 5.97 | 24.80 | 315 | 0.06 |
| 50 | 13.08 | 33.12 | 6.03 | 302 | 30 | 13.5 | 33.05 | 6.01 | 24.80 | 315 | 0.09 |
| 74 | - | 33.12 | 5.93 | | 50 | 13.08 | 33.12 | 6.03 | 24.94 | 302 | 0.16 |
| 98 | 10.05 | - | 4.97 | | 75 | 12.6 | 33.12 | 5.92 | 25.04 | 293 | 0.23 |
| 149 | 8.97 | 33.69 | 3.46 | 190 | 100 | 10.00 | 33.23 | 4.86 | 25.59 | 240 | 0.30 |
| 197 | 8.31 | 33.93 | 2.97 | 163 | 150 | 8.95 | 33.70 | 3.44 | 26.13 | 189 | 0.41 |
| 242 | 7.88 | 34.07 | 2.23 | 146 | 200 | 8.28 | 33.94 | 2.91 | 26.42 | 162 | 0.50 |
| | | | | | 250 | (7.82) | (34.08) | (2.16) | (26.60) | (145) | (0.57) |
| HORIZON; April 12, 1952; 1736 GCT;[a] 32°02'N, 122°23.5'W; sounding, 2050 fm; wind, 270°, force 3; weather, overcast; sea, rough; wire angle, 10°. | | | | | | | | | | | 87.90 |
| 888 | 4.12 | 34.42 | | 75 | | | | | | | |
| 893 | 4.10 | 34.45 | | 73 | | | | | | | |
| 898 | 4.12 | 34.43 | | 74 | | | | | | | |
| 903 | 4.09 | 34.42 | | 75 | | | | | | | |
| 908 | 4.07 | 34.45 | | 72 | | | | | | | |
| 913 | 4.06 | 34.42 | | 74 | | | | | | | |
| 918 | 4.06 | 34.43 | | 74 | | | | | | | |
| 923 | 4.04 | 34.43 | | 73 | | | | | | | |
| 928 | 4.06 | 34.47 | | 71 | | | | | | | |
| 933 | 4.02 | 34.45 | | 72 | | | | | | | |
| CREST; April 2, 1952; 0523 GCT; 33°28'N, 117°47.5'W; sounding, 315 fm; wind, 330°, force 2; weather, light fog; sea, moderate; wire angle, 03°. | | | | | | | | | | | 90.28 |
| 0 | - | 33.31 | 6.15 | | 0 | 14.4 | 33.31 | 6.15 | 24.82 | 314 | 0.00 |
| 10 | 14.29 | 33.30 | 6.29 | 312 | 10 | 14.29 | 33.30 | 6.29 | 24.83 | 312 | 0.03 |
| 25 | - | 33.30 | 6.27 | | 20 | 13.0 | 33.30 | 6.27 | 25.10 | 287 | 0.06 |
| 50 | - | 33.40 | 4.20 | | 30 | 12.5 | 33.30 | 6.20 | 25.20 | 278 | 0.09 |
| 74 | 9.84 | 33.60 | 3.33 | 210 | 50 | 11.0 | 33.40 | 4.20 | 25.55 | 244 | 0.14 |
| 98 | - | 33.82 | 2.87 | | 75 | 9.7 | 33.62 | 3.33 | 25.95 | 207 | 0.20 |
| 149 | 9.03 | 34.02 | 2.28 | 167 | 100 | 9.30 | 33.84 | 2.82 | 26.18 | 184 | 0.25 |
| 196 | 8.82 | 34.18 | 1.58 | 152 | 150 | 9.0 | 34.03 | 2.26 | 26.37 | 166 | 0.34 |
| 242 | 8.44 | 34.17 | 1.34 | 147 | 200 | 8.78 | 34.18 | 1.53 | 26.53 | 151 | 0.42 |
| 289 | 8.16 | 34.25 | 1.05 | 137 | 250 | 8.39 | 34.18 | 1.30 | 26.59 | 145 | 0.49 |
| 342 | 7.73 | 34.25 | 0.88 | 131 | 300 | 8.09 | 34.25 | 1.00 | 26.69 | 136 | 0.57 |
| 389 | 7.14 | 34.27 | 0.68 | 121 | 400 | 7.07 | 34.27 | 0.67 | 26.86 | 120 | 0.70 |
| 438 | 6.84 | 34.25 | 0.63 | 119 | 500 | (6.37) | (34.27) | (0.44) | (26.95) | (111) | (0.82) |
| 486 | 6.46 | 34.27 | 0.46 | 113 | | | | | | | |
| CREST; April 2, 1952; 0740 GCT; 33°24.5'N, 117°55'W; sounding, 300 fm; wind, 250°, force 2; weather, light fog; sea, slight; wire angle, 00°. | | | | | | | | | | | 90.30 |
| 0 | - | 33.22 | 6.24 | | 0 | 14.1 | 33.22 | 6.24 | 24.81 | 315 | 0.00 |
| 10 | 13.74 | 33.31 | 6.41 | 301 | 10 | 13.74 | 33.31 | 6.41 | 24.96 | 301 | 0.03 |
| 25 | - | 33.24 | 6.45 | | 20 | (13.10) | 33.24 | 6.45 | (25.03) | (294) | (0.06) |
| 50 | - | 33.37 | 4.24 | | 30 | (12.60) | 33.25 | 6.00 | (25.14) | (284) | (0.09) |
| 74 | 9.86 | 33.53 | 3.76 | 216 | 50 | (11.00) | 33.37 | 4.24 | (25.53) | (246) | (0.14) |
| 98 | - | 33.78 | 3.23 | | 75 | (9.80) | 33.54 | 3.74 | (25.87) | (214) | (0.20) |
| 149 | 8.81 | 34.00 | 2.66 | 165 | 100 | (9.50) | 33.80 | 3.22 | (26.12) | (190) | (0.25) |
| 195 | 8.47 | 34.09 | 1.92 | 153 | 150 | 8.80 | 34.00 | 2.62 | 26.39 | 165 | (0.34) |
| 241 | 8.17 | 34.18 | 1.84 | 142 | 200 | 8.41 | 34.10 | 1.91 | 26.53 | 152 | (0.42) |
| 288 | 8.16 | 34.23 | 1.84 | 138 | 250 | 8.17 | 34.20 | 1.84 | 26.64 | 141 | (0.50) |
| 339 | 7.32 | 34.20 | 0.82 | 129 | 300 | 8.07 | 34.23 | 1.82 | 26.68 | 137 | (0.57) |
| 386 | 6.85 | 34.25 | 0.64 | 119 | 400 | 6.78 | 34.26 | 0.58 | 26.89 | 117 | (0.70) |
| 434 | 6.61 | 34.29 | 0.49 | 113 | 500 | (6.27) | (34.31) | (0.42) | (26.99) | (107) | (0.82) |
| 483 | 6.36 | 34.31 | 0.42 | 108 | | | | | | | |

a) Test cast.

SIO

CCOFI
5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| 90.37 | CREST; April 2, 1952; 1135 GCT; 33°10.5'N, 118°23.5'W; sounding, 650 fm; wind, 280°, force 2; weather, light fog; sea, slight; wire angle, 01°. | | | | | | | | | | |
| 0 | - | 33.30 | 5.98 | | 0 | 14.6 | 33.30 | 5.98 | 24.77 | 319 | 0.00 |
| 10 | 13.73 | 33.26 | 6.18 | 304 | 10 | 13.73 | 33.26 | 6.18 | 24.92 | 304 | 0.03 |
| 25 | - | 33.28 | 6.43 | | 20 | 13.1 | 33.27 | 6.43 | 25.05 | 291 | 0.06 |
| 50 | - | 33.31 | 4.86 | | 30 | 12.6 | 33.29 | 6.43 | 25.17 | 281 | 0.09 |
| 75 | - | 33.51 | 3.77 | | 50 | 11.7 | 33.31 | 4.86 | 25.35 | 263 | 0.14 |
| 99 | - | 33.75 | 3.23 | | 75 | 10.0 | 33.51 | 3.77 | 25.81 | 220 | 0.20 |
| 153 | 8.91 | 33.96 | 2.56 | 169 | 100 | 9.4 | 33.77 | 3.20 | 26.11 | 191 | 0.26 |
| 200 | - | 34.13 | 1.70 | | 150 | 9.0 | 33.95 | 2.62 | 26.32 | 171 | 0.35 |
| 248 | 7.85 | 34.14 | 1.31 | 141 | 200 | 8.37 | 34.13 | 1.70 | 26.56 | 149 | 0.43 |
| 295 | 7.40 | 34.16 | 0.99 | 133 | 250 | 7.83 | 34.14 | 1.30 | 26.64 | 140 | 0.50 |
| 395 | 6.68 | 34.27 | 0.56 | 115 | 300 | 7.35 | 34.17 | 0.96 | 26.74 | 132 | 0.57 |
| 490 | 6.04 | 34.27 | 0.32 | 107 | 400 | 6.63 | 34.27 | 0.55 | 26.92 | 115 | 0.70 |
| 589 | 5.60 | 34.38 | 0.24 | 94 | 500 | 5.98 | 34.27 | 0.31 | 27.00 | 107 | 0.82 |
| 685 | 5.31 | 34.42 | 0.24 | 88 | 600 | 5.57 | 34.39 | 0.24 | 27.15 | 93 | 0.93 |
| 785 | 4.70 | 34.40 | 0.35 | 82 | 700 | 5.23 | 34.42 | 0.26 | 27.21 | 87 | 1.02 |
| 979 | 4.18 | 34.47 | 0.37 | 72 | 800 | 4.63 | 34.40 | 0.36 | 27.26 | 82 | 1.12 |
| | | | | | 1000 | (4.14) | (34.47) | (0.37) | (27.37) | (71) | (1.29) |
| 90.45 | CREST; April 2, 1952; 1516 GCT; 32°54.5'N, 118°56'W; sounding, 900 fm; wind, 310°, force 2; weather, light fog; sea, rough; wire angle, 07°. | | | | | | | | | | |
| 0 | - | 33.28 | 5.06 | | 0 | 13.4 | 33.28 | 5.06 | 25.00 | 296 | 0.00 |
| 10 | 13.26 | 33.24 | 5.77 | 297 | 10 | 13.26 | 33.24 | 5.77 | 25.00 | 297 | 0.03 |
| 25 | - | 33.26 | - | | 20 | 13.1 | 33.26 | | 25.05 | 292 | 0.06 |
| 50 | 11.82 | 33.26 | - | 269 | 30 | 13.1 | 33.26 | | 25.05 | 292 | 0.09 |
| 74 | - | 33.37 | 4.52 | | 50 | 11.82 | 33.26 | | 25.29 | 269 | 0.14 |
| 98 | 9.46 | 33.55 | 3.92 | 208 | 75 | 10.7 | 33.37 | 4.54 | 25.58 | 241 | 0.21 |
| 149 | 8.68 | 33.86 | 3.07 | 173 | 100 | 9.38 | 33.56 | 3.89 | 25.95 | 206 | 0.27 |
| 196 | 8.44 | 34.09 | 2.00 | 153 | 150 | 8.68 | 33.87 | 3.02 | 26.30 | 173 | 0.36 |
| 243 | 8.02 | 34.22 | 1.42 | 137 | 200 | 8.42 | 34.11 | 1.94 | 26.53 | 151 | 0.44 |
| 289 | 7.72 | 34.23 | 1.09 | 132 | 250 | 7.98 | 34.22 | 1.38 | 26.69 | 137 | 0.52 |
| 387 | 6.91 | 34.29 | 0.62 | 117 | 300 | 7.62 | 34.23 | 1.00 | 26.75 | 131 | 0.59 |
| 484 | 6.18 | 34.36 | 0.36 | 102 | 400 | 6.81 | 34.31 | 0.58 | 26.92 | 114 | 0.71 |
| 588 | 5.58 | 34.36 | 0.29 | 95 | 500 | 6.08 | 34.36 | 0.33 | 27.06 | 101 | 0.83 |
| | | | | | 600 | (5.50) | (34.36) | | (27.13) | (94) | (0.93) |
| 90.53 | CREST; April 2, 1952; 1951 GCT; 32°39'N, 119°28.5'W; sounding, 700 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 23°. | | | | | | | | | | |
| 0 | - | 33.13 | 5.91 | | 0 | 13.6 | 33.13 | 5.91 | 24.85 | 311 | 0.00 |
| 9 | 13.56 | 33.17 | 5.80 | 308 | 10 | 13.6 | 33.18 | 5.80 | 24.88 | 308 | 0.03 |
| 23 | - | 33.24 | 5.87 | | 20 | 13.6 | 33.24 | 5.86 | 24.93 | 303 | 0.06 |
| 46 | - | 33.24 | 5.84 | | 30 | 13.5 | 33.24 | 5.86 | 24.95 | 301 | 0.09 |
| 69 | - | 33.21 | 5.45 | | 50 | 13.4 | 33.24 | 5.83 | 24.97 | 299 | 0.15 |
| 92 | - | 33.31 | 4.57 | | 75 | 11.5 | 33.22 | 5.24 | 25.32 | 266 | 0.22 |
| 141 | 8.92 | 33.86 | 3.36 | 177 | 100 | 10.0 | 33.37 | 4.35 | 25.70 | 230 | 0.29 |
| 183 | - | 34.05 | 2.52 | | 150 | 8.82 | 33.92 | 3.18 | 26.32 | 171 | 0.39 |
| 226 | 8.10 | 34.13 | 2.17 | 145 | 200 | 8.31 | 34.09 | 2.33 | 26.53 | 151 | 0.47 |
| 90.60 | CREST; April 2, 1952; 2355 GCT; 32°27'N, 119°53.5'W; sounding, 480 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 17°. | | | | | | | | | | |
| 0 | - | 33.24 | 5.92 | | 0 | 13.7 | 33.24 | 5.92 | 24.91 | 305 | 0.00 |
| 9 | 13.63 | 33.17 | 5.79 | 309 | 10 | 13.6 | 33.17 | 5.79 | 24.88 | 308 | 0.03 |
| 23 | - | 33.22 | 5.99 | | 20 | 13.6 | 33.22 | 5.97 | 24.92 | 305 | 0.06 |
| 52 | 12.90 | 33.17 | 5.96 | 295 | 30 | 13.6 | 33.21 | 5.98 | 24.91 | 305 | 0.09 |
| 76 | - | 33.22 | 4.80 | | 50 | 12.7 | 33.17 | 5.97 | 25.06 | 291 | 0.15 |
| 104 | 9.42 | 33.44 | 3.85 | 216 | 75 | 10.5 | 33.22 | 4.95 | 25.50 | 249 | 0.22 |
| 153 | 8.70 | 33.86 | 3.34 | 174 | 100 | 9.6 | 33.39 | 3.91 | 25.78 | 222 | 0.28 |
| 202 | 7.86 | 33.98 | 2.72 | 153 | 150 | 8.78 | 33.84 | 3.41 | 26.27 | 176 | 0.38 |
| 256 | - | 34.05 | 2.01 | | 200 | 7.90 | 33.98 | 2.75 | 26.51 | 153 | 0.46 |
| 301 | 6.86 | 34.09 | 1.54 | 131 | 250 | 7.27 | 34.04 | 2.11 | 26.65 | 140 | 0.54 |
| 408 | 6.21 | 34.20 | 0.71 | 115 | 300 | 6.87 | 34.09 | 1.56 | 26.74 | 131 | 0.61 |
| 513 | 5.64 | 34.27 | 0.37 | 103 | 400 | 6.26 | 34.19 | 0.77 | 26.90 | 116 | 0.74 |
| 620 | 5.10 | 34.34 | 0.30 | 91 | 500 | 5.73 | 34.26 | 0.41 | 27.02 | 104 | 0.85 |
| | | | | | 600 | 5.20 | 34.33 | 0.30 | 27.14 | 93 | 0.96 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; April 3, 1952; 0633 GCT; 32°04'N, 120°39'W; sounding, 1200 fm; wind, 330°, force 6; weather, partly cloudy; sea, rough; wire angle, 38°. 90.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.30 | 5.74 | | 0 | 14.5 | 33.30 | 5.74 | 24.79 | 317 | 0.00 |
| 8 | 14.44 | 33.30 | 5.84 | 315 | 10 | 14.4 | 33.30 | 5.83 | 24.81 | 315 | 0.03 |
| 21 | - | 33.31 | 5.79 | | 20 | 14.4 | 33.31 | 5.79 | 24.82 | 314 | 0.06 |
| 44 | - | 33.33 | 5.70 | | 30 | 14.4 | 33.32 | 5.73 | 24.83 | 313 | 0.09 |
| 63 | - | 33.31 | 5.71 | | 50 | 14.4 | 33.33 | 5.71 | 24.83 | 312 | 0.16 |
| 84 | - | 33.22 | 5.86 | | 75 | 14.0 | 33.27 | 5.79 | 24.87 | 309 | 0.24 |
| 115 | - | 33.17 | 5.48 | | 100 | 12.2 | 33.18 | 5.78 | 25.16 | 281 | 0.31 |
| 141 | 9.28 | 33.53 | 4.42 | 207 | 150 | 8.82 | 33.69 | 4.00 | 26.14 | 188 | 0.43 |
| 172 | 8.46 | 33.86 | 3.50 | 170 | 200 | 8.18 | 34.01 | 3.30 | 26.49 | 155 | 0.52 |
| 198 | 8.20 | 34.00 | 3.32 | 156 | 250 | 7.54 | 34.10 | 2.61 | 26.66 | 139 | 0.59 |
| 261 | 7.39 | 34.11 | 2.42 | 137 | 300 | 6.95 | 34.14 | 1.88 | 26.77 | 129 | 0.66 |
| 323 | - | 34.15 | 1.51 | | 400 | 6.17 | 34.16 | 0.77 | 26.89 | 117 | 0.79 |
| 389 | 6.22 | 34.16 | 0.84 | 118 | 500 | 5.71 | 34.25 | 0.45 | 27.02 | 105 | 0.90 |
| 521 | 5.61 | 34.27 | 0.43 | 102 | 600 | 5.26 | 34.32 | 0.35 | 27.13 | 95 | 1.01 |
| 665 | 4.94 | 34.37 | 0.28 | 87 | 700 | 4.78 | 34.39 | 0.29 | 27.24 | 84 | 1.11 |
| 838 | 4.32 | 34.42 | 0.46 | 77 | 800 | 4.42 | 34.42 | 0.40 | 27.30 | 78 | 1.20 |

CREST; April 3, 1952; 1301 GCT; 31°46.5'N, 121°19'W; sounding, 2000 fm; wind, 340°, force 5; weather, light fog; sea, rough; wire angle, 30°. 90.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.42 | 5.67 | | 0 | 14.7 | 33.42 | 5.67 | 24.84 | 312 | 0.00 |
| 8 | 14.68 | 33.40 | 5.73 | 313 | 10 | 14.7 | 33.40 | 5.73 | 24.82 | 313 | 0.03 |
| 26 | - | 33.40 | 5.70 | | 20 | 14.7 | 33.40 | 5.72 | 24.82 | 313 | 0.06 |
| 52 | 14.70 | 33.39 | 5.67 | 314 | 30 | 14.7 | 33.40 | 5.69 | 24.82 | 313 | 0.09 |
| 77 | - | 33.40 | 5.68 | | 50 | 14.7 | 33.39 | 5.67 | 24.82 | 314 | 0.16 |
| 102 | 14.52 | 33.39 | 5.69 | 310 | 75 | 14.7 | 33.40 | 5.67 | 24.82 | 313 | 0.24 |
| 150 | 10.62 | 33.26 | 5.10 | 248 | 100 | 14.5 | 33.39 | 5.68 | 24.86 | 310 | 0.31 |
| 197 | 8.85 | 33.75 | 3.80 | 184 | 150 | 10.62 | 33.26 | 5.10 | 25.51 | 248 | 0.46 |
| 245 | 8.19 | 34.01 | 3.36 | 155 | 200 | 8.81 | 33.78 | 3.72 | 26.21 | 181 | 0.56 |
| 295 | 7.49 | 34.05 | 2.59 | 142 | 250 | 8.12 | 34.01 | 3.27 | 26.50 | 154 | 0.65 |
| 392 | 6.49 | 34.20 | 1.31 | 118 | 300 | 7.43 | 34.06 | 2.51 | 26.64 | 141 | 0.73 |
| 498 | 6.06 | 34.27 | 0.48 | 108 | 400 | 6.44 | 34.21 | 1.24 | 26.89 | 117 | 0.86 |
| 608 | 5.40 | 34.36 | 0.33 | 93 | 500 | 6.03 | 34.27 | 0.46 | 26.99 | 107 | 0.98 |
| | | | | | 600 | 5.46 | 34.35 | 0.33 | 27.13 | 95 | 1.09 |

CREST; April 3, 1952; 1653 GCT; 31°25'N, 121°59'W; sounding, 2050 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 35°. 90.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.33 | 5.64 | | 0 | 14.8 | 33.33 | 5.64 | 24.75 | 321 | 0.00 |
| 8 | 14.73 | 33.35 | 5.55 | 318 | 10 | 14.7 | 33.36 | 5.55 | 24.79 | 316 | 0.03 |
| 25 | - | 33.39 | 5.62 | | 20 | 14.7 | 33.39 | 5.61 | 24.82 | 314 | 0.06 |
| 50 | - | 33.35 | 5.57 | | 30 | 14.7 | 33.39 | 5.62 | 24.82 | 314 | 0.09 |
| 72 | - | 33.24 | 5.67a) | | 50 | 14.5 | 33.35 | 5.57 | 24.83 | 313 | 0.16 |
| 94 | - | 33.13 | 5.69 | | 75 | 13.7 | 33.23 | 5.68 | 24.90 | 306 | 0.24 |
| 128 | 10.37 | 33.31 | 4.91 | 240 | 100 | 13.0 | 33.13 | 5.67 | 24.97 | 300 | 0.31 |
| 152 | - | 33.53 | 4.32 | | 150 | 9.74 | 33.51 | 4.35 | 25.85 | 215 | 0.44 |
| 178 | 9.12 | 33.84 | 4.25 | 181 | 200 | 8.73 | 33.84 | 3.80 | 26.27 | 176 | 0.54 |
| 204 | 8.66 | 33.84 | 3.73 | 175 | 250 | 8.14 | 33.93 | 3.29 | 26.43 | 160 | 0.63 |
| 255 | 8.07 | 33.95 | 3.21 | 158 | 300 | 7.50 | 34.05 | 2.48 | 26.62 | 143 | 0.71 |
| 312 | 7.30 | 34.07 | 2.27 | 138 | 400 | 6.11 | 34.11 | 1.03 | 26.86 | 120 | 0.84 |
| 368 | 6.40 | 34.09 | 1.40 | 125 | 500 | 5.56 | 34.22 | 0.54 | 27.01 | 105 | 0.96 |
| 499 | 5.57 | 34.22 | 0.54 | 106 | 600 | 5.16 | 34.27 | 0.33 | 27.10 | 97 | 1.07 |
| 639 | 5.01 | 34.29 | 0.30 | 94 | 700 | 4.79 | 34.33 | 0.30 | 27.19 | 89 | 1.17 |
| 784 | 4.50 | 34.40 | 0.31 | 80 | 800 | (4.45) | (34.41) | | (27.29) | (79) | (1.26) |

a) Alternate value, 5.51 ml/L, not used in interpolation.

SIO

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5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 90.100 | CREST; April 4, 1952; 0020, 0045 GCT; 31°05'N, 122°39'W; sounding, 2000 fm; wind, 340°, force 6; weather, overcast; sea, very rough; wire angle, 32°, 30°. | | | | | | | | | | |
| 0 | - | 33.30 | 5.59 | | 0 | 14.5 | 33.30 | 5.59 | 24.79 | 317 | 0.00 |
| 9 | 14.49 | 33.30 | - | 316 | 10 | 14.5 | 33.30 | 5.65 | 24.79 | 317 | 0.03 |
| 26 | - | 33.33 | 5.76 | | 20 | 14.5 | 33.33 | 5.72 | 24.81 | 314 | 0.06 |
| 50 | 14.56 | 33.33 | 5.73 | 316 | 30 | 14.5 | 33.33 | 5.76 | 24.81 | 314 | 0.09 |
| 76 | - | 33.33 | 5.71 | | 50 | 14.56 | 33.33 | 5.73 | 24.80 | 316 | 0.16 |
| 101 | 13.02 | 33.08 | 5.85 | 304 | 75 | 14.5 | 33.33 | 5.71 | 24.81 | 314 | 0.24 |
| 146 | 10.80 | 33.30 | 5.16 | 248 | 100 | 13.0 | 33.08 | 5.85 | 24.93 | 304 | 0.32 |
| 192 | 8.87 | 33.58 | 4.24 | 197 | 150 | 10.65 | 33.33 | 5.06 | 25.56 | 244 | 0.45 |
| 239 | - | 33.93 | 3.55 | | 200 | 8.72 | 33.66 | 4.07 | 26.13 | 189 | 0.56 |
| 287 | 7.56 | 33.96 | 2.53 | 150 | 250 | 8.02 | 33.94 | 3.25 | 26.46 | 158 | 0.65 |
| 381 | 6.44 | 34.11 | 1.50 | 124 | 300 | 7.50 | 33.97 | 2.35 | 26.56 | 148 | 0.73 |
| 488 | 5.75 | 34.18 | 0.74 | 111 | 400 | 6.30 | 34.12 | 1.32 | 26.84 | 122 | 0.87 |
| | | | | | 500 | 5.68 | 34.19 | 0.70 | 26.97 | 109 | 0.99 |
| 620 | 5.08 | 34.29 | 0.40 | 95 | 600 | 5.18 | 34.27 | 0.40 | 27.10 | 97 | 1.10 |
| 93.27 | CREST; April 5, 1952; 1651 GCT; 32°55'N, 117°19'W; sounding, 105 fm; wind, 350°, force 1; weather, fog; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 15.09 | 33.30 | 6.15 | 329 | 0 | 15.09 | 33.30 | 6.15 | 24.66 | 329 | 0.00 |
| 10 | 13.27 | 33.30 | 6.38 | 293 | 10 | 13.27 | 33.30 | 6.38 | 25.04 | 293 | 0.03 |
| 25 | 11.80 | 33.33 | 5.50 | 263 | 20 | 12.36 | 33.31 | 6.30 | 25.23 | 275 | 0.06 |
| 49 | 10.22 | 33.62 | 3.57 | 215 | 30 | 11.56 | 33.35 | 4.89 | 25.41 | 258 | 0.09 |
| 72 | 9.89 | 33.78 | 3.06 | 198 | 50 | 10.21 | 33.63 | 3.48 | 25.87 | 214 | 0.13 |
| 96 | 9.44 | 33.98 | 2.44 | 176 | 75 | 9.84 | 33.83 | 2.98 | 26.09 | 193 | 0.18 |
| 120 | 9.18 | 34.04 | 2.24 | 168 | 100 | 9.39 | 34.00 | 2.41 | 26.29 | 174 | 0.23 |
| 149 | 9.09 | 34.09 | 2.05 | 162 | 150 | (9.09) | (34.09) | (2.05) | (26.41) | (162) | (0.32) |
| 93.30 | CREST; April 5, 1952; 1443 GCT; 32°50'N, 117°31.5'W; sounding, 500 fm; wind, 060°, force 1; weather, fog; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | - | 33.31 | 5.88 | | 0 | 15.0 | 33.31 | 5.88 | 24.69 | 326 | 0.00 |
| 10 | 14.52 | 33.31 | 6.01 | 316 | 10 | 14.52 | 33.31 | 6.01 | 24.79 | 316 | 0.03 |
| 25 | - | 33.30 | 6.40 | | 20 | 13.3 | 33.30 | 6.36 | 25.04 | 293 | 0.06 |
| 50 | 12.28 | 33.31 | 6.12 | 273 | 30 | 12.8 | 33.30 | 6.37 | 25.14 | 284 | 0.09 |
| 75 | - | 33.39 | 4.30 | | 50 | 12.28 | 33.31 | 6.12 | 25.25 | 273 | 0.15 |
| 99 | 9.78 | 33.63 | 3.54 | 207 | 75 | 10.4 | 33.39 | 4.30 | 25.65 | 235 | 0.21 |
| 150 | 8.86 | 34.04 | 2.55 | 163 | 100 | 9.75 | 33.64 | 3.50 | 25.95 | 206 | 0.27 |
| 197 | 8.53 | 34.14 | 2.08 | 150 | 150 | 8.86 | 34.04 | 2.55 | 26.41 | 163 | 0.36 |
| 243 | 8.12 | 34.16 | 1.66 | 143 | 200 | 8.50 | 34.14 | 2.03 | 26.54 | 150 | 0.44 |
| 289 | 8.02 | 34.22 | 1.33 | 137 | 250 | 8.10 | 34.16 | 1.61 | 26.62 | 143 | 0.52 |
| 389 | 7.06 | 34.29 | 0.66 | 119 | 300 | 8.01 | 34.23 | 1.26 | 26.69 | 136 | 0.59 |
| 484 | 6.29 | 34.32 | 0.40 | 107 | 400 | 6.96 | 34.29 | 0.59 | 26.89 | 117 | 0.72 |
| 588 | 5.69 | 34.36 | 0.29 | 96 | 500 | 6.17 | 34.33 | 0.38 | 27.02 | 104 | 0.84 |
| | | | | | 600 | (5.62) | (34.37) | | (27.12) | (95) | (0.94) |
| 93.40 | CREST; April 5, 1952; 1003, 1020 GCT; 32°30'N, 118°12.5'W; sounding, 1050 fm; wind, 260°, force 1; weather, fog; sea, smooth; wire angle, 03°, 08°. | | | | | | | | | | |
| 0 | - | 33.33 | 6.04 | | 0 | 14.6 | 33.33 | 6.04 | 24.79 | 316 | 0.00 |
| 10 | 13.75 | 33.31 | 6.21 | 301 | 10 | 13.75 | 33.31 | 6.21 | 24.95 | 301 | 0.03 |
| 25 | - | 33.31 | 6.51 | | 20 | 13.0 | 33.31 | 6.49 | 25.11 | 287 | 0.06 |
| 50 | 11.80 | 33.35 | 5.55 | 262 | 30 | 12.5 | 33.31 | 6.50 | 25.20 | 277 | 0.09 |
| 75 | - | 33.50 | 4.04 | | 50 | 11.80 | 33.35 | 5.55 | 25.37 | 262 | 0.14 |
| 98 | 9.52 | 33.69 | 3.45 | 199 | 75 | 10.0 | 33.50 | 4.04 | 25.80 | 220 | 0.20 |
| 150 | 8.58 | 34.00 | 2.69 | 162 | 100 | 9.47 | 33.71 | 3.39 | 26.05 | 196 | 0.26 |
| 196 | 8.14 | 34.10 | 2.17 | 148 | 150 | 8.58 | 34.00 | 2.69 | 26.42 | 162 | 0.35 |
| 242 | 7.82 | 34.15 | 1.58 | 139 | 200 | 8.10 | 34.11 | 2.11 | 26.58 | 146 | 0.42 |
| 288 | 7.55 | 34.20 | 1.19 | 132 | 250 | 7.78 | 34.16 | 1.51 | 26.67 | 138 | 0.50 |
| 388 | 6.82 | 34.27 | 0.63 | 117 | 300 | 7.47 | 34.21 | 1.09 | 26.75 | 130 | 0.57 |
| 483 | 6.16 | 34.33 | 0.43 | 104 | 400 | 6.74 | 34.28 | 0.62 | 26.91 | 115 | 0.70 |
| | | | | | 500 | 6.05 | 34.34 | 0.41 | 27.05 | 102 | 0.81 |
| 587 | 5.64 | 34.38 | 0.32 | 94 | 600 | (5.58) | (34.39) | | (27.14) | (93) | (0.92) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; April 5, 1952; 0439 GCT; 32°10'N, 118°54'W; sounding, 800 fm; wind, 260°, force 1; weather, clear; sea, slight; wire angle, 05°. | | | | | | | | | | | 93.50 |
| 0 | - | 33.33 | 5.88 | | 0 | 15.2 | 33.33 | 5.88 | 24.66 | 329 | 0.00 |
| 10 | 14.33 | 33.31 | 5.84 | 312 | 10 | 14.33 | 33.31 | 5.84 | 24.83 | 312 | 0.03 |
| 25 | - | 33.24 | 5.79 | | 20 | 14.2 | 33.26 | 5.81 | 24.82 | 314 | 0.06 |
| 50 | 13.99 | 33.22 | 5.79 | 312 | 30 | 14.2 | 33.23 | 5.79 | 24.80 | 316 | 0.09 |
| 75 | - | 33.28 | 5.70 | | 50 | 13.99 | 33.22 | 5.79 | 24.84 | 312 | 0.16 |
| 98 | 10.40 | 33.24 | 4.60 | 246 | 75 | 13.4 | 33.28 | 5.70 | 25.00 | 296 | 0.23 |
| 149 | 9.22 | 33.82 | 3.21 | 184 | 100 | 10.34 | 33.24 | 4.50 | 25.54 | 245 | 0.30 |
| 195 | 8.89 | 34.02 | 2.59 | 165 | 150 | 9.21 | 33.83 | 3.19 | 26.19 | 184 | 0.41 |
| 241 | 8.25 | 34.18 | 1.92 | 143 | 200 | 8.81 | 34.04 | 2.50 | 26.42 | 162 | 0.50 |
| 288 | 7.69 | 34.20 | 1.53 | 134 | 250 | 8.13 | 34.19 | 1.84 | 26.64 | 141 | 0.58 |
| 385 | 6.83 | 34.27 | 0.77 | 117 | 300 | 7.57 | 34.21 | 1.39 | 26.74 | 132 | 0.65 |
| 481 | 6.06 | 34.33 | 0.52 | 103 | 400 | 6.71 | 34.29 | 0.71 | 26.92 | 114 | 0.78 |
| 584 | 5.52 | 34.34 | 0.35 | 96 | 500 | 5.95 | 34.33 | 0.49 | 27.05 | 102 | 0.89 |
| | | | | | 600 | (5.46) | (34.34) | | (27.12) | (95) | (1.00) |
| CREST; April 5, 1952; 0005, 0033 GCT; 31°52'N, 119°30'W; sounding, 1050 fm; wind, 260°, force 3; weather, cloudy; sea, rough; wire angle, 13°, 14°. | | | | | | | | | | | 93.60 |
| 0 | - | 33.37 | 5.62 | | 0 | 15.4 | 33.37 | 5.62 | 24.65 | 330 | 0.00 |
| 10 | 14.80 | 33.39 | 5.73 | 316 | 10 | 14.80 | 33.39 | 5.73 | 24.80 | 316 | 0.03 |
| 24 | - | 33.39 | 5.68 | | 20 | 14.6 | 33.39 | 5.69 | 24.84 | 312 | 0.06 |
| 48 | 14.06 | 33.30 | 5.74 | 308 | 30 | 14.5 | 33.39 | 5.68 | 24.86 | 310 | 0.09 |
| 73 | - | 33.27 | 5.52 | | 50 | 14.0 | 33.30 | 5.74 | 24.89 | 307 | 0.16 |
| 96 | 10.66 | 33.17 | 4.07 | 256 | 75 | 12.5 | 33.27 | 5.50 | 25.17 | 280 | 0.23 |
| 145 | 9.40 | 33.75 | 3.56 | 192 | 100 | 10.49 | 33.17 | 4.01 | 25.46 | 253 | 0.30 |
| 189 | 8.82 | 33.96 | 2.84 | 168 | 150 | 9.31 | 33.78 | 3.49 | 26.13 | 189 | 0.41 |
| 234 | 8.41 | 34.14 | 2.17 | 149 | 200 | 8.70 | 34.01 | 2.70 | 26.41 | 163 | 0.50 |
| 280 | 8.03 | 34.18 | 1.63 | 140 | 250 | 8.30 | 34.17 | 1.97 | 26.60 | 145 | 0.58 |
| | | | | | 300 | 7.88 | 34.18 | 1.46 | 26.67 | 138 | 0.65 |
| 381 | 7.19 | 34.22 | 0.83 | 126 | 400 | 7.03 | 34.23 | 0.74 | 26.83 | 123 | 0.79 |
| 475 | 6.37 | 34.29 | 0.50 | 110 | 500 | 6.19 | 34.30 | 0.45 | 27.00 | 107 | 0.91 |
| 578 | 5.66 | 34.31 | 0.38 | 100 | 600 | (5.54) | (34.31) | | (27.09) | (98) | (1.02) |
| CREST; April 4, 1952; 1916 GCT; 31°33'N, 120°16'W; sounding, 2100 fm; wind, 180°, force 1; weather, cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | | 93.70 |
| 0 | - | 33.15 | 5.85 | | 0 | 13.9 | 33.15 | 5.85 | 24.80 | 316 | 0.00 |
| 10 | 13.65 | 33.13 | 5.91 | 312 | 10 | 13.65 | 33.13 | 5.91 | 24.84 | 312 | 0.03 |
| 25 | - | 33.15 | 5.88 | | 20 | 13.6 | 33.14 | 5.91 | 24.85 | 311 | 0.06 |
| 49 | 13.52 | 33.15 | 5.88 | 308 | 30 | 13.6 | 33.15 | 5.88 | 24.86 | 310 | 0.09 |
| 73 | - | 33.13 | 5.86 | | 50 | 13.5 | 33.15 | 5.88 | 24.88 | 308 | 0.16 |
| 97 | 12.38 | 33.10 | 5.99 | 291 | 75 | 13.0 | 33.13 | 5.86 | 24.97 | 300 | 0.23 |
| 147 | 9.39 | 33.40 | 4.39 | 218 | 100 | 12.30 | 33.10 | 5.97 | 25.08 | 289 | 0.31 |
| 193 | 8.80 | 33.89 | 3.64 | 173 | 150 | 9.34 | 33.45 | 4.31 | 25.87 | 214 | 0.43 |
| 239 | 7.89 | 33.96 | 2.76 | 155 | 200 | 8.68 | 33.90 | 3.55 | 26.33 | 170 | 0.53 |
| 285 | 7.67 | 34.07 | 2.31 | 143 | 250 | 7.83 | 34.00 | 2.65 | 26.54 | 151 | 0.61 |
| 383 | 6.48 | 34.11 | 1.30 | 125 | 300 | 7.51 | 34.08 | 2.15 | 26.64 | 140 | 0.69 |
| 477 | 5.80 | 34.14 | 0.71 | 114 | 400 | 6.33 | 34.11 | 1.16 | 26.83 | 123 | 0.82 |
| 580 | 5.40 | 34.23 | 0.43 | 103 | 500 | 5.71 | 34.16 | 0.64 | 26.95 | 112 | 0.95 |
| | | | | | 600 | (5.32) | (34.24) | | (27.06) | (101) | (1.06) |

SIO

CCOFI
5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **93.80** | CREST; April 4, 1952; 1257 GCT; 31°12'N, 121°00'W; sounding, 2070 fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 11°. | | | | | | | | | | |
| 0 | - | 33.26 | 5.73 | | 0 | 14.4 | 33.26 | 5.73 | 24.78 | 318 | 0.00 |
| 10 | 14.22 | 33.22 | 5.80 | 317 | 10 | 14.22 | 33.22 | 5.80 | 24.79 | 317 | 0.03 |
| 25 | - | 33.26 | 5.79 | | 20 | 14.3 | 33.25 | 5.80 | 24.79 | 316 | 0.06 |
| 54 | 14.24 | 33.22 | 5.75 | 317 | 30 | 14.3 | 33.25 | 5.77 | 24.79 | 316 | 0.10 |
| 78 | - | 33.26 | 5.66 | | 50 | 14.2 | 33.22 | 5.76 | 24.79 | 316 | 0.16 |
| 107 | 13.09 | 33.19 | 5.62 | 297 | 75 | 14.2 | 33.26 | 5.66 | 24.82 | 314 | 0.24 |
| 156 | 9.90 | 33.31 | 4.59 | 233 | 100 | 13.5 | 33.20 | 5.63 | 24.92 | 304 | 0.32 |
| 208 | 8.80 | 33.75 | 3.67 | 183 | 150 | 10.11 | 33.27 | 4.90 | 25.60 | 239 | 0.45 |
| 263 | 7.71 | 34.00 | 2.84 | 149 | 200 | 9.00 | 33.69 | 3.69 | 26.11 | 191 | 0.56 |
| 310 | 7.22 | 34.02 | 2.19 | 141 | 250 | 7.95 | 33.98 | 3.05 | 26.50 | 154 | 0.65 |
| 418 | 6.37 | 34.14 | 0.94 | 121 | 300 | 7.31 | 34.01 | 2.33 | 26.62 | 143 | 0.73 |
| 523 | 5.74 | 34.23 | 0.48 | 107 | 400 | 6.51 | 34.12 | 1.05 | 26.81 | 124 | 0.87 |
| 635 | 5.31 | 34.29 | 0.45 | 97 | 500 | 5.86 | 34.21 | 0.53 | 26.97 | 110 | 0.99 |
| | | | | | 600 | 5.42 | 34.27 | 0.45 | 27.07 | 100 | 1.10 |
| **93.90** | CREST; April 4, 1952; 0724, 0747 GCT; 30°51'N, 121°34.5'W; sounding, 2000 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 24°, 26°. | | | | | | | | | | |
| 0 | 14.54 | 33.33 | 5.70 | 315 | 0 | 14.54 | 33.33 | 5.70 | 24.80 | 315 | 0.00 |
| 8 | 14.54 | 33.33 | 5.63 | 315 | 10 | (14.54) | 33.33 | 5.63 | (24.80) | (315) | (0.03) |
| 27 | - | 33.31 | 5.58 | | 20 | (14.53) | 33.32 | 5.60 | (24.80) | (316) | (0.06) |
| 54 | 14.52 | 33.31 | 5.45 | 316 | 30 | (14.52) | 33.31 | 5.56 | (24.79) | (316) | (0.09) |
| 80 | 13.85 | 33.21 | 5.13 | 310 | 50 | (14.52) | 33.31 | 5.47 | (24.79) | (316) | (0.16) |
| 105 | 13.34 | 33.19 | 5.70 | 302 | 75 | 14.48 | 33.23 | 5.15 | 24.74 | 321 | (0.24) |
| 154 | - | 33.37 | 4.47 | | 100 | 13.51 | 33.19 | 5.70 | 24.91 | 305 | (0.32) |
| | | | | | 150 | (10.34) | 33.34 | 4.56 | (25.62) | (238) | (0.45) |
| 212 | - | 33.78 | 3.69 | | 200 | (8.89) | 33.69 | 3.89 | (26.13) | (189) | (0.56) |
| 263 | 7.87 | 33.98 | 2.87 | 153 | 250 | (8.06) | 33.95 | 3.07 | (26.46) | (158) | (0.65) |
| 313 | 7.26 | 34.05 | 2.14 | 139 | 300 | 7.40 | 34.04 | 2.35 | 26.63 | 142 | (0.73) |
| 414 | 6.21 | 34.11 | 1.08 | 121 | 400 | 6.34 | 34.09 | 1.20 | 26.81 | 124 | (0.87) |
| 522 | 5.55 | 34.23 | 0.56 | 105 | 500 | 5.68 | 34.21 | 0.61 | 26.99 | 108 | (0.99) |
| 631 | 5.10 | 34.31 | 0.38 | 94 | 600 | 5.20 | 34.29 | 0.43 | 27.11 | 96 | (1.10) |
| **97.32** | CREST; April 6, 1952; 2135 GCT; 32°10.5'N, 117°16.5'W; sounding, 750 fm; wind, 280°, force 3; weather, partly cloudy; sea, slight; wire angle, 09°. | | | | | | | | | | |
| 0 | - | 33.33 | 5.85 | | 0 | 16.0 | 33.33 | 5.85 | 24.48 | 346 | 0.00 |
| 10 | 14.45 | 33.28 | 6.12 | 317 | 10 | 14.45 | 33.28 | 6.12 | 24.79 | 317 | 0.03 |
| 25 | - | 33.24 | 6.47 | | 20 | 13.6 | 33.25 | 6.46 | 24.94 | 303 | 0.06 |
| 50 | - | 33.28 | 5.03 | | 30 | 13.5 | 33.24 | 6.44 | 24.95 | 301 | 0.09 |
| 74 | - | 33.48 | 4.01 | | 50 | 11.6 | 33.28 | 5.03 | 25.35 | 263 | 0.15 |
| 98 | 9.54 | 33.71 | 3.42 | 198 | 75 | 10.0 | 33.49 | 4.01 | 25.79 | 221 | 0.21 |
| 149 | - | 33.91 | 3.05 | | 100 | 9.5 | 33.72 | 3.38 | 26.06 | 196 | 0.26 |
| 194 | 8.93 | 34.13 | 2.03 | 157 | 150 | 8.9 | 33.92 | 3.03 | 26.31 | 172 | 0.36 |
| 241 | 8.44 | 34.18 | 1.58 | 146 | 200 | 8.89 | 34.14 | 1.94 | 26.48 | 156 | 0.44 |
| 287 | 8.09 | 34.25 | 1.27 | 136 | 250 | 8.37 | 34.20 | 1.52 | 26.61 | 144 | 0.52 |
| 338 | - | 34.25 | 0.90 | | 300 | 7.87 | 34.25 | 1.15 | 26.73 | 133 | 0.59 |
| 385 | 6.90 | 34.22 | 0.82 | 122 | 400 | 6.80 | 34.23 | 0.75 | 26.86 | 120 | 0.72 |
| 432 | 6.60 | 34.27 | 0.52 | 114 | 500 | 6.18 | 34.34 | 0.34 | 27.03 | 104 | 0.84 |
| 481 | 6.30 | 34.34 | 0.33 | 105 | 600 | (5.60) | (34.34) | | (27.10) | (97) | (0.95) |
| 584 | 5.68 | 34.34 | 0.46 | 98 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; April 7, 1952; 0207 GCT; 31°55'N, 117°50.5'W; sounding, 335 fm; wind, 240°, force 2; weather, partly cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | | 97.40 |
| 0 | - | 33.28 | 5.92 | | 0 | 15.6 | 33.28 | 5.92 | 24.54 | 341 | 0.00 |
| 10 | 14.74 | 33.28 | 5.98 | 323 | 10 | 14.74 | 33.28 | 5.98 | 24.72 | 323 | 0.03 |
| 25 | - | 33.22 | 6.20 | | 20 | 13.6 | 33.23 | 6.18 | 24.92 | 304 | 0.06 |
| 50 | - | 33.30 | 5.14 | | 30 | 13.4 | 33.23 | 6.16 | 24.96 | 300 | 0.09 |
| 75 | 10.57 | 33.39 | 4.43 | 238 | 50 | 11.7 | 33.30 | 5.15 | 25.35 | 264 | 0.15 |
| 99 | - | 33.60 | 3.85 | | 75 | 10.57 | 33.39 | 4.45 | 25.62 | 238 | 0.21 |
| 151 | 9.07 | 33.86 | 2.42 | 179 | 100 | 9.96 | 33.60 | 3.80 | 25.89 | 212 | 0.27 |
| 199 | 8.52 | 34.02 | 2.52 | 159 | 150 | 9.10 | 33.86 | 2.42 | 26.23 | 180 | 0.37 |
| 245 | 7.92 | 34.04 | 2.06 | 149 | 200 | 8.51 | 34.02 | 2.52 | 26.45 | 159 | 0.46 |
| | | | | | 250 | (7.89) | (34.04) | (2.00) | (26.56) | (149) | (0.54) |
| CREST; April 7, 1952; 0702, 0715 GCT;[a] 31°35'N, 118°31'W; sounding, 1300 fm; wind, 230°, force 2; weather, partly cloudy; sea, smooth; wire angle, 02°, 03°. | | | | | | | | | | | 97.50 |
| 0 | 14.7 | 33.22 | | 327 | | | | | | | |
| 10 | 13.93 | 33.19 | | 313 | | | | | | | |
| 20 | - | 33.21 | | | | | | | | | |
| 30 | 13.80 | 33.21 | | 309 | | | | | | | |
| 50 | - | 33.19 | | | | | | | | | |
| 70 | 11.65 | 33.15 | | 274 | | | | | | | |
| 88 | - | 33.31 | | | | | | | | | |
| 106 | 9.83 | 33.55 | | 214 | | | | | | | |
| 115 | - | 33.62 | | | | | | | | | |
| 125 | 9.28 | 33.60 | | 202 | | | | | | | |
| 129 | 9.18 | 33.64 | | 197 | | | | | | | |
| 134 | 9.33 | 33.64 | | 199 | | | | | | | |
| 192 | 8.45 | 34.00 | | 160 | | | | | | | |
| 240 | 7.96 | 34.09 | | 146 | | | | | | | |
| 290 | 7.66 | 34.07 | | 143 | | | | | | | |
| CREST; April 7, 1952; 0809 GCT; 31°35'N, 118°31'W; sounding, 1300 fm; wind, 230°, force 2; weather, partly cloudy; sea, smooth; wire angle, 03°. | | | | | | | | | | | 97.50 |
| 0 | - | 33.24 | 5.92 | | 0 | 14.7 | 33.24 | 5.92 | 24.70 | 325 | 0.00 |
| 10 | 14.26 | 33.22 | 5.99 | 318 | 10 | 14.26 | 33.22 | 5.99 | 24.78 | 318 | 0.03 |
| 25 | - | 33.24 | 5.91 | | 20 | 13.8 | 33.23 | 5.93 | 24.88 | 308 | 0.06 |
| 50 | 13.10 | 33.21 | 6.06 | 296 | 30 | 13.7 | 33.23 | 5.92 | 24.90 | 306 | 0.09 |
| 75 | - | 33.21 | 5.45 | | 50 | 13.10 | 33.21 | 6.06 | 25.01 | 296 | 0.15 |
| 99 | 10.27 | 33.35 | 4.39 | 236 | 75 | 11.3 | 33.21 | 5.45 | 25.35 | 263 | 0.22 |
| 150 | 9.08 | 33.75 | 3.49 | 188 | 100 | 10.22 | 33.36 | 4.33 | 25.66 | 234 | 0.29 |
| 196 | 8.54 | 33.97 | 2.62 | 163 | 150 | 9.08 | 33.75 | 3.49 | 26.15 | 188 | 0.39 |
| 242 | 8.00 | 34.02 | 2.23 | 152 | 200 | 8.50 | 33.98 | 2.54 | 26.42 | 162 | 0.48 |
| 289 | 7.71 | 34.11 | 1.59 | 141 | 250 | 7.95 | 34.03 | 2.16 | 26.54 | 150 | 0.56 |
| 389 | 6.78 | 34.20 | 0.83 | 122 | 300 | 7.64 | 34.13 | 1.45 | 26.66 | 138 | 0.64 |
| 486 | 6.05 | 34.25 | 0.49 | 109 | 400 | 6.66 | 34.21 | 0.78 | 26.86 | 120 | 0.77 |
| 589 | 5.39 | 34.33 | 0.35 | 95 | 500 | 5.97 | 34.25 | 0.46 | 26.99 | 108 | 0.89 |
| | | | | | 600 | (5.31) | (34.34) | | (27.14) | (94) | (1.00) |

a) Bathythermograph calibration cast.

S10

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5204

| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |

97.60 CREST; April 7, 1952; 1300 GCT; 31°12'N, 119°08.5'W; sounding, 1900 fm; wind, 200°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.37 | 5.64 | | 0 | 15.3 | 33.37 | 5.64 | 24.67 | 328 | 0.00 |
| 10 | 15.18 | 33.39 | 5.73 | 324 | 10 | 15.18 | 33.39 | 5.73 | 24.71 | 324 | 0.03 |
| 25 | - | 33.44 | 5.68 | | 20 | 15.0 | 33.44 | 5.69 | 24.79 | 317 | 0.06 |
| 50 | 14.94 | 33.44 | 5.67 | 315 | 30 | 14.9 | 33.44 | 5.67 | 24.81 | 315 | 0.10 |
| 75 | - | 33.26u | 5.78 | | 50 | 14.9 | 33.44 | 5.67 | 24.81 | 315 | 0.16 |
| 99 | 11.69 | 33.40 | 4.73 | 256 | 75 | 14.4 | 33.40 | 5.78 | 24.89 | 307 | 0.24 |
| 152 | 9.52 | 33.74 | 3.43 | 195 | 100 | 11.56 | 33.41 | 4.73 | 25.46 | 253 | 0.31 |
| 199 | 9.25 | 34.07 | 2.36 | 166 | 150 | 9.56 | 33.73 | 3.50 | 26.05 | 196 | 0.42 |
| 246 | 8.31 | 34.07 | 2.26 | 152 | 200 | 9.24 | 34.07 | 2.34 | 26.37 | 166 | 0.51 |
| 293 | 8.07 | 34.18 | 1.58 | 141 | 250 | 8.30 | 34.07 | 2.23 | 26.52 | 152 | 0.60 |
| 392 | 7.00 | 34.23 | 0.97 | 122 | 300 | 8.00 | 34.19 | 1.53 | 26.66 | 139 | 0.67 |
| 489 | 6.34 | 34.29 | 0.50 | 110 | 400 | 6.92 | 34.23 | 0.90 | 26.84 | 121 | 0.81 |
| 594 | 5.82 | 34.33 | 0.33 | 100 | 500 | 6.28 | 34.30 | 0.47 | 26.99 | 108 | 0.93 |
| | | | | | 600 | (5.79) | (34.33) | (0.33) | (27.07) | (100) | (1.04) |

97.70 CREST; April 7, 1952; 1816 GCT; 30°51'N, 119°51'W; sounding, 2050 fm; wind, 230°, force 4; weather, partly cloudy; sea, moderate; wire angle, 23°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.37 | 5.75 | | 0 | 15.3 | 33.37 | 5.75 | 24.67 | 328 | |
| 9 | 15.16 | 33.39 | 5.72 | 324 | 10 | | 33.39 | 5.72 | | | |
| 23 | 15.49u | 33.53 | 5.70 | 320 | 20 | | 33.50 | 5.70 | | | |
| 46 | - | 33.60 | 5.68 | | 30 | | 33.58 | 5.69 | | | |
| 69 | - | 33.57 | 5.67 | | 50 | | 33.60 | 5.67 | | | |
| 89 | 12.72 | 33.22 | 5.58 | 288 | 75 | | 33.50 | 5.64 | | | |
| 136 | 9.90 | 33.37 | 4.47 | 228 | 100 | 11.72 | 33.23 | 5.50 | 25.29 | 269 | 0.00a) |
| 178 | 8.97 | 33.87 | 3.20 | 177 | 150 | 9.52 | 33.53 | 3.79 | 25.91 | 211 | 0.12a) |
| 221 | 8.31 | 34.05 | 2.62 | 154 | 200 | 8.59 | 33.99 | 2.89 | 26.41 | 162 | 0.22a) |
| 266 | 8.06 | 34.13 | 2.00 | 144 | 250 | 8.13 | 34.11 | 2.22 | 26.58 | 147 | 0.30a) |
| 360 | 6.99 | 34.20 | 1.26 | 125 | 300 | 7.76 | 34.17 | 1.66 | 26.68 | 137 | 0.37a) |
| 451 | 6.22 | 34.25 | 0.68 | 111 | 400 | 6.57 | 34.21 | 1.00 | 26.88 | 118 | 0.50a) |
| 553 | 5.78 | 34.38 | 0.30 | 96 | 500 | 6.00 | 34.31 | 0.43 | 27.03 | 104 | 0.62a) |

97.80 CREST; April 7, 1952; 2314 GCT; 30°35'N, 120°31'W; sounding, 2050 fm; wind, 250°, force 4; weather, partly cloudy; sea, slight; wire angle, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.20 | 5.82 | | 0 | 14.8 | 33.20 | 5.82 | 24.65 | 330 | 0.00 |
| 10 | 14.44 | 33.19 | 5.90 | 323 | 10 | 14.44 | 33.19 | 5.90 | 24.72 | 323 | 0.03 |
| 24 | - | 33.22 | 5.86 | | 20 | (14.20) | 33.21 | 5.86 | (24.78) | (317) | (0.06) |
| 53 | 13.44 | 33.20 | 5.96 | 303 | 30 | (14.00) | 33.22 | 5.87 | (24.83) | (313) | (0.10) |
| 77 | - | 33.19 | 5.94 | | 50 | (13.50) | 33.20 | 5.94 | (24.92) | (304) | (0.16) |
| 105 | 10.61 | 33.22 | 5.07 | 251 | 75 | (13.00) | 33.19 | 5.94 | (25.01) | (295) | (0.23) |
| 155 | 9.00 | 33.66 | 3.69 | 193 | 100 | (11.00) | 33.21 | 5.30 | (25.40) | (258) | (0.30) |
| 203 | 8.26 | 33.95 | 3.01 | 161 | 150 | 9.05 | 33.61 | 3.80 | 26.04 | 197 | (0.42) |
| 257 | 7.52 | 34.04 | 2.47 | 144 | 200 | 8.34 | 33.93 | 3.05 | 26.40 | 163 | (0.51) |
| 304 | 7.14 | 34.07 | 1.97 | 136 | 250 | 7.62 | 34.03 | 2.54 | 26.59 | 146 | (0.59) |
| 410 | 6.26 | 34.17 | 0.88 | 118 | 300 | 7.16 | 34.07 | 2.01 | 26.69 | 136 | (0.66) |
| 515 | 5.62 | 34.25 | 0.53 | 104 | 400 | 6.32 | 34.16 | 0.93 | 26.87 | 119 | (0.79) |
| 622 | 5.13 | 34.34 | 0.32 | 92 | 500 | 5.70 | 34.24 | 0.56 | 27.01 | 106 | (0.91) |
| | | | | | 600 | 5.23 | 34.32 | 0.36 | 27.13 | 94 | (1.02) |

a) This value is calculated with respect to the 100-decibar surface rather than the sea surface.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; April 8, 1952; 0433, 0450 GCT; 30°15'N, 121°11'W; sounding, 2150 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 21°, 24°. | | | | | | | | | | | 97.90 |
| 0 | - | 33.28 | 5.78 | | 0 | 14.8 | 33.28 | 5.78 | 24.71 | 324 | 0.00 |
| 9 | 14.73 | 33.30 | 5.78 | 321 | 10 | 14.7 | 33.30 | 5.78 | 24.75 | 321 | 0.03 |
| 23 | - | 33.24 | 5.83 | | 20 | 14.4 | 33.24 | 5.82 | 24.77 | 319 | 0.06 |
| 51 | 14.28 | 33.26 | 5.84a) | 315 | 30 | 14.3 | 33.25 | 5.83 | 24.79 | 316 | 0.10 |
| 74 | - | 33.27 | 5.80 | | 50 | 14.3 | 33.26 | 5.84 | 24.80 | 316 | 0.16 |
| 102 | 13.07 | 33.21 | 5.70 | 295 | 75 | 14.1 | 33.27 | 5.80 | 24.85 | 311 | 0.24 |
| 151 | 10.34 | 33.37 | 4.84 | 235 | 100 | 13.3 | 33.21 | 5.71 | 24.97 | 300 | 0.32 |
| | | | | | 150 | 10.45 | 33.36 | 4.89 | 25.62 | 238 | 0.45 |
| 189 | 8.78 | 33.77 | 3.66 | 182 | 200 | 8.52 | 33.84 | 3.49 | 26.31 | 173 | 0.56 |
| 243 | 7.91 | 34.02 | 2.77 | 150 | 250 | 7.85 | 34.04 | 2.65 | 26.56 | 148 | 0.64 |
| 288 | 7.49 | 34.11 | 1.99 | 138 | 300 | 7.32 | 34.11 | 1.83 | 26.69 | 136 | 0.71 |
| 392 | 6.23 | 34.13 | 1.11 | 120 | 400 | 6.13 | 34.13 | 1.06 | 26.87 | 119 | 0.84 |
| 493 | 5.70 | 34.26 | 0.59 | 104 | 500 | 5.67 | 34.27 | 0.56 | 27.04 | 103 | 0.96 |
| 598 | 5.25 | 34.34 | 0.36 | 93 | 600 | (5.23) | (34.34) | (0.36) | (27.15) | (93) | (1.06) |
| CREST; April 10, 1952; 0149 GCT; 31°42'N, 116°44'W; sounding, 75 fm; wind, 290°, force 2; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 100.29 |
| 0 | 14.32 | 33.35 | 6.56 | 309 | 0 | 14.32 | 33.35 | 6.56 | 24.87 | 309 | 0.00 |
| 10 | 12.85 | 33.37 | 6.91 | 279 | 10 | 12.85 | 33.37 | 6.91 | 25.18 | 279 | 0.03 |
| 20 | 11.52 | 33.39 | 4.96 | 254 | 20 | 11.52 | 33.39 | 4.96 | 25.45 | 254 | 0.06 |
| 30 | 10.88 | 33.39 | 4.44 | 243 | 30 | 10.88 | 33.39 | 4.44 | 25.56 | 243 | 0.08 |
| 50 | 10.26 | 33.53 | 3.90 | 222 | 50 | 10.26 | 33.53 | 3.90 | 25.78 | 222 | 0.13 |
| 75 | 9.85 | 33.68 | 3.38 | 205 | 75 | 9.85 | 33.68 | 3.38 | 25.97 | 205 | 0.18 |
| CREST; April 10, 1952; 0040 GCT; 31°40.5'N, 116°45'W; sounding, 250 fm; wind, 290°, force 2; weather, cloudy; sea, slight; wire angle, 10°. | | | | | | | | | | | 100.30 |
| 0 | - | 33.35 | 6.25 | | 0 | 15.0 | 33.35 | 6.25 | 24.72 | 323 | 0.00 |
| 10 | 13.17 | 33.35 | 6.08 | 287 | 10 | 13.17 | 33.35 | 6.08 | 25.10 | 287 | 0.03 |
| 25 | - | 33.39 | 6.01 | | 20 | 13.01 | 33.37 | 6.04 | 25.15 | 282 | 0.06 |
| 49 | 10.73 | 33.51 | 4.10 | 232 | 30 | 12.05 | 33.41 | 5.86 | 25.37 | 262 | 0.09 |
| 72 | 9.99 | 33.71 | 3.40 | 205 | 50 | 10.71 | 33.53 | 4.08 | 25.70 | 230 | 0.14 |
| 95 | 9.67 | 33.84 | 3.06 | 190 | 75 | 9.95 | 33.73 | 3.38 | 25.99 | 203 | 0.19 |
| 147 | 9.45 | 33.96 | 2.69 | 178 | 100 | 9.64 | 33.86 | 2.99 | 26.14 | 188 | 0.24 |
| 194 | 8.90 | 34.13 | 1.68 | 157 | 150 | 9.42 | 33.97 | 2.64 | 26.27 | 176 | 0.33 |
| 241 | 8.50 | 34.18 | 1.34 | 147 | 200 | 8.85 | 34.14 | 1.54 | 26.49 | 155 | 0.42 |
| 289 | 8.20 | 34.20 | 1.15 | 141 | 250 | 8.44 | 34.19 | 1.32 | 26.59 | 145 | 0.49 |
| 342 | 7.91 | 34.25 | 0.87 | 133 | 300 | 8.14 | 34.21 | 1.09 | 26.65 | 140 | 0.57 |
| 392 | 7.30 | 34.27 | 0.70 | 123 | 400 | (7.24) | (34.27) | (0.68) | (26.83) | (123) | (0.70) |
| CREST; April 9, 1952; 1949 GCT; 31°19'N, 117°25'W; sounding, 1000 fm; wind, 290°, force 2; weather, cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | | 100.40 |
| 0 | - b) | 33.33 | 5.83 | | 0 | 15.5 | 33.33 | 5.83 | 24.60 | 335 | 0.00 |
| 10 | 15.13 | 33.31 | 5.60 | 329 | 10 | 15.13 | 33.31 | 5.60 | 24.66 | 329 | 0.03 |
| 25 | - | 33.31 | 5.87 | | 20 | (14.80) | 33.31 | 5.83 | (24.73) | (322) | (0.07) |
| 50 | - | 33.31 | 5.82 | | 30 | (14.20) | 33.31 | 5.86 | (24.86) | (310) | (0.10) |
| 75 | - | 33.24 | 5.04 | | 50 | (13.80) | 33.31 | 5.82 | (24.94) | (302) | (0.16) |
| 99 | - | 33.40 | 4.25 | | 75 | (11.80) | 33.24 | 5.04 | (25.28) | (270) | (0.23) |
| 150 | 9.78 | 33.84 | 3.11 | 192 | 100 | (10.30) | 33.41 | 4.22 | (25.68) | (232) | (0.29) |
| 197 | - | 34.11 | 2.18 | | 150 | 9.78 | 33.84 | 3.11 | 26.10 | 192 | (0.40) |
| 243 | 8.92 | 34.23 | 1.38 | 149 | 200 | 9.21 | 34.12 | 2.08 | 26.42 | 162 | (0.49) |
| 289 | 8.38 | 34.23 | 1.16 | 141 | 250 | 8.88 | 34.23 | 1.34 | 26.55 | 149 | (0.57) |
| 387 | 7.06 | 34.26 | 0.85 | 121 | 300 | 8.20 | 34.23 | 1.12 | 26.66 | 139 | (0.65) |
| 480 | 6.31 | 34.29 | 0.42 | 109 | 400 | 6.94 | 34.27 | 0.80 | 26.87 | 119 | (0.78) |
| 579 | 5.68 | 34.34 | 0.39 | 98 | 500 | 6.18 | 34.30 | 0.41 | 27.00 | 107 | (0.90) |
| 772 | 4.73 | 34.39 | 0.43 | 84 | 600 | 5.54 | 34.35 | 0.40 | 27.12 | 95 | (1.01) |
| 964 | 4.02 | 34.40 | 0.63 | 75 | 700 | 5.04 | 34.38 | 0.42 | 27.20 | 88 | (1.11) |
| 1167 | 3.50 | 34.49 | 0.80 | 64 | 800 | 4.65 | 34.39 | 0.45 | 27.25 | 83 | (1.20) |
| | | | | | 1000 | 3.92 | 34.41 | 0.66 | 27.35 | 74 | (1.37) |

a) Alternate value, 5.93 ml/L, not used in interpolation.

b) The bathythermograph slide for this station was missing. The temperature values were interpolated from a curve drawn using the underway slide made one hour earlier.

SIO

CCOFI
5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **100.50** | CREST; April 9, 1952; 1259 GCT; 30°58'N, 118°05'W; sounding, 1000 fm; wind, 340°, force 3; weather, cloudy; sea, missing; wire angle, 10°. | | | | | | | | | | |
| 0 | - | 33.35 | 6.00 | | 0 | 14.9 | 33.35 | 6.00 | 24.74 | 321 | 0.00 |
| 10 | 14.80 | 33.32 | 5.77 | 321 | 10 | 14.80 | 33.32 | 5.77 | 24.74 | 321 | 0.03 |
| 25 | - | 33.35 | 5.87 | | 20 | 14.7 | 33.35 | 5.85 | 24.79 | 317 | 0.06 |
| 51 | 11.04 | 33.35 | 4.54 | 249 | 30 | 14.3 | 33.35 | 5.76 | 24.87 | 309 | 0.10 |
| 75 | - | 33.35 | 3.98 | | 50 | 11.2 | 33.35 | 4.57 | 25.48 | 251 | 0.15 |
| 98 | 9.98 | 33.68 | 3.46 | 207 | 75 | 10.5 | 33.35 | 3.98 | 25.60 | 240 | 0.21 |
| 148 | 9.42 | 33.95 | 2.79 | 178 | 100 | 9.93 | 33.70 | 3.43 | 25.97 | 204 | 0.27 |
| 196 | 9.10 | 34.07 | 2.29 | 164 | 150 | 9.41 | 33.96 | 2.75 | 26.26 | 177 | 0.37 |
| 243 | 8.41 | 34.12 | 2.02 | 150 | 200 | 9.05 | 34.07 | 2.25 | 26.40 | 163 | 0.45 |
| 288 | 7.82 | 34.22 | 1.37 | 134 | 250 | 8.34 | 34.13 | 1.95 | 26.56 | 148 | 0.53 |
| 388 | 7.00 | 34.27 | 0.67 | 119 | 300 | 7.69 | 34.23 | 1.26 | 26.74 | 132 | 0.61 |
| 483 | 6.27 | 34.31 | 0.36 | 107 | 400 | 6.90 | 34.27 | 0.61 | 26.88 | 118 | 0.74 |
| 585 | 5.71 | 34.36 | 0.30 | 97 | 500 | 6.16 | 34.32 | 0.33 | 27.02 | 105 | 0.85 |
| | | | | | 600 | (5.65) | (34.37) | | (27.12) | (95) | (0.96) |
| **100.60** | CREST; April 9, 1952; 0753 GCT; 30°41'N, 118°47.5'W; sounding, 1700 fm; wind, 290°, force 3; weather, overcast; sea, slight; wire angle, 16°. | | | | | | | | | | |
| 0 | - | 33.37 | 5.30 | | 0 | 15.4 | 33.37 | 5.30 | 24.65 | 330 | 0.00 |
| 9 | 15.28 | 33.37 | 5.49 | 328 | 10 | 15.3 | 33.37 | 5.50 | 24.67 | 328 | 0.03 |
| 24 | - | 33.37 | 5.64 | | 20 | 15.0 | 33.37 | 5.64 | 24.74 | 322 | 0.07 |
| 48 | - | 33.37 | 5.67 | | 30 | 14.7 | 33.37 | 5.65 | 24.80 | 316 | 0.10 |
| 72 | - | 33.26 | 5.76 | | 50 | 14.6 | 33.37 | 5.67 | 24.82 | 314 | 0.16 |
| 95 | - | 33.19 | 5.07 | | 75 | 13.6 | 33.25 | 5.74 | 24.94 | 303 | 0.24 |
| 145 | 9.90 | 33.57 | 3.91 | 214 | 100 | 11.8 | 33.19 | 4.95 | 25.24 | 274 | 0.31 |
| 187 | - | 33.87 | 2.96 | - | 150 | 9.79 | 33.61 | 3.74 | 25.92 | 209 | 0.43 |
| 230 | 8.58 | 34.04 | 2.46 | 159 | 200 | 8.95 | 33.94 | 2.76 | 26.32 | 171 | 0.53 |
| 274 | 8.07 | 34.09 | 2.12 | 147 | 250 | 8.34 | 34.07 | 2.32 | 26.51 | 153 | 0.61 |
| 366 | 7.33 | 34.40u | 0.96 | | 300 | 7.85 | 34.14 | 1.84 | 26.64 | 141 | 0.69 |
| 454 | 6.46 | 34.23 | 0.70 | 116 | 400 | 7.00 | 34.20 | 0.79 | 26.81 | 125 | 0.83 |
| 548 | 5.82 | 34.31 | 0.40 | 102 | 500 | 6.08 | 34.27 | 0.53 | 26.99 | 108 | 0.95 |
| 735 | 4.90 | 34.42 | 0.35 | 83 | 600 | 5.56 | 34.35 | 0.36 | 27.12 | 96 | 1.06 |
| 922 | 4.18 | 34.43 | 0.54 | 75 | 700 | 5.06 | 34.41 | 0.35 | 27.22 | 86 | 1.16 |
| 1122 | 3.62 | 34.47 | 0.73 | 66 | 800 | 4.60 | 34.42 | 0.37 | 27.28 | 80 | 1.25 |
| | | | | | 1000 | 3.90 | 34.44 | 0.64 | 27.37 | 71 | 1.41 |
| **100.70** | CREST; April 9, 1952; 0255 GCT; 30°20.5'N, 119°27'W; sounding, 2050 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 09°. | | | | | | | | | | |
| 0 | - | 33.57 | 5.60 | | 0 | 15.9 | 33.57 | 5.60 | 24.69 | 326 | 0.00 |
| 10 | 15.86 | 33.58 | 5.60 | 324 | 10 | 15.86 | 33.58 | 5.60 | 24.71 | 324 | 0.03 |
| 25 | - | 33.57 | 5.58 | | 20 | 15.8 | 33.57 | 5.58 | 24.71 | 324 | 0.07 |
| 50 | 15.54 | 33.58 | 5.62 | 318 | 30 | 15.7 | 33.57 | 5.59 | 24.74 | 322 | 0.10 |
| 74 | - | 33.57 | 5.67 | | 50 | 15.54 | 33.58 | 5.62 | 24.78 | 318 | 0.16 |
| 98 | 15.23 | 33.57 | 5.60 | 312 | 75 | 15.3 | 33.57 | 5.66 | 24.82 | 313 | 0.24 |
| 150 | 10.64 | 33.51 | 4.43 | 230 | 100 | 15.19 | 33.57 | 5.59 | 24.85 | 311 | 0.32 |
| 196 | 9.10 | 33.91 | 3.37 | 176 | 150 | 10.64 | 33.51 | 4.43 | 25.70 | 230 | 0.46 |
| 242 | 8.65 | 34.02 | 2.60 | 161 | 200 | 9.06 | 33.92 | 3.28 | 26.28 | 175 | 0.56 |
| 290 | 8.19 | 34.11 | 2.18 | 148 | 250 | 8.58 | 34.03 | 2.50 | 26.45 | 159 | 0.64 |
| 388 | 7.15 | 34.16 | 1.38 | 130 | 300 | 8.07 | 34.12 | 2.09 | 26.59 | 145 | 0.72 |
| 486 | 6.34 | 34.29 | 0.49 | 110 | 400 | 7.00 | 34.18 | 1.25 | 26.79 | 126 | 0.86 |
| 589 | 5.83 | 34.38 | 0.46 | 97 | 500 | 6.26 | 34.31 | 0.49 | 27.00 | 107 | 0.99 |
| | | | | | 600 | (5.80) | (34.39) | | (27.12) | (96) | (1.10) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; April 8, 1952; 2155 GCT; 30°01'N, 120°07'W; sounding, 2000 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | 100.80 |
| 0 | - | 33.48 | 5.63 | | 0 | 15.9 | 33.48 | 5.63 | 24.62 | 333 | 0.00 |
| 10 | 15.50 | 33.44 | 5.63 | 327 | 10 | 15.50 | 33.44 | 5.63 | 24.68 | 327 | 0.03 |
| 25 | - | 33.48 | 5.71 | | 20 | 15.5 | 33.46 | 5.68 | 24.70 | 326 | 0.07 |
| 50 | - | 33.58 | 5.66 | | 30 | 15.5 | 33.51 | 5.70 | 24.73 | 322 | 0.10 |
| 75 | - | 33.58 | 5.66 | | 50 | 15.6 | 33.58 | 5.66 | 24.77 | 319 | 0.16 |
| 98 | - | 33.37 | 5.50 | | 75 | 15.3 | 33.58 | 5.66 | 24.83 | 313 | 0.24 |
| 151 | 10.19 | 33.51 | 4.21 | 223 | 100 | 13.7 | 33.37 | 5.48 | 25.01 | 296 | 0.32 |
| 197 | - | 33.95 | 3.26 | | 150 | 10.21 | 33.51 | 4.23 | 25.77 | 223 | 0.45 |
| 244 | 8.36 | 34.05 | 2.62 | 155 | 200 | 9.16 | 33.96 | 3.21 | 26.30 | 173 | 0.55 |
| 291 | 7.64 | 34.09 | 2.21 | 141 | 250 | 8.28 | 34.05 | 2.56 | 26.51 | 153 | 0.63 |
| 390 | 6.54 | 34.23 | 0.93 | 117 | 300 | 7.56 | 34.09 | 2.14 | 26.64 | 140 | 0.71 |
| 483 | 5.94 | 34.29 | 0.32 | 105 | 400 | 6.57 | 34.24 | 0.80 | 26.90 | 116 | 0.84 |
| 583 | 5.63 | 34.42 | 0.31 | 91 | 500 | 5.86 | 34.29 | 0.32 | 27.03 | 104 | 0.96 |
| 777 | 4.65 | 34.47 | 0.38 | 77 | 600 | 5.46 | 34.43 | 0.31 | 27.19 | 89 | 1.06 |
| 971 | 4.01 | 34.52 | 0.58 | 66 | 700 | 5.01 | 34.46 | 0.34 | 27.27 | 81 | 1.15 |
| 1174 | 3.44 | 34.58 | 0.84 | 56 | 800 | 4.55 | 34.47 | 0.40 | 27.33 | 76 | 1.24 |
| | | | | | 1000 | 3.94 | 34.53 | 0.62 | 27.44 | 65 | 1.40 |
| CREST; April 8, 1952; 1652, 1714 GCT; 29°40'N, 120°47'W; sounding, 2000 fm; wind, 010°, force 4; weather, cloudy; sea, rough; wire angle, 05°, 05°. | | | | | | | | | | | 100.90 |
| 0 | - | 33.68 | 5.64 | | 0 | 16.0 | 33.68 | 5.64 | 24.75 | 320 | 0.00 |
| 10 | 15.97 | 33.68 | 5.61 | 320 | 10 | 15.97 | 33.68 | 5.61 | 24.76 | 320 | 0.03 |
| 25 | - | 33.68 | 5.56 | | 20 | 16.0 | 33.68 | 5.56 | 24.75 | 320 | 0.06 |
| 55 | 15.78 | 33.68 | 5.56 | 315 | 30 | 15.9 | 33.68 | 5.56 | 24.78 | 318 | 0.10 |
| 80 | - | 33.66 | 5.51 | | 50 | 15.8 | 33.68 | 5.56 | 24.80 | 316 | 0.16 |
| 108 | 12.41 | 33.40 | 4.80 | 269 | 75 | 15.0 | 33.67 | 5.54 | 24.97 | 300 | 0.24 |
| 160 | 9.72 | 33.69 | 3.63 | 202 | 100 | 12.7 | 33.43 | 5.05 | 25.26 | 272 | 0.31 |
| 212 | 8.70 | 34.00 | 2.85 | 163 | 150 | 9.89 | 33.58 | 3.84 | 25.88 | 213 | 0.43 |
| | | | | | 200 | 9.01 | 33.97 | 3.00 | 26.33 | 170 | 0.53 |
| 269 | 7.88 | 34.07 | 2.44 | 146 | 250 | 8.04 | 34.05 | 2.61 | 26.54 | 150 | 0.61 |
| 316 | 7.48 | 34.11 | 1.80 | 138 | 300 | 7.62 | 34.10 | 2.02 | 26.64 | 140 | 0.69 |
| 425 | 6.46 | 34.18 | 0.95 | 119 | 400 | 6.69 | 34.16 | 1.10 | 26.82 | 124 | 0.82 |
| 532 | 5.75 | 34.29 | 0.41 | 102 | 500 | 5.95 | 34.26 | 0.54 | 27.00 | 107 | 0.94 |
| 641 | 5.11 | 34.36 | 0.34 | 90 | 600 | 5.33 | 34.33 | 0.34 | 27.13 | 95 | 1.05 |
| CREST; April 8, 1952; 1110 GCT; 29°20'N, 121°27'W; sounding, 2110 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | | 100.100 |
| 0 | - | 33.40 | 5.77 | | 0 | 15.1 | 33.40 | 5.77 | 24.74 | 322 | 0.00 |
| 10 | 15.02 | 33.40 | 5.75 | 320 | 10 | 15.02 | 33.40 | 5.75 | 24.76 | 320 | 0.03 |
| 25 | - | 33.40 | 5.75 | | 20 | 15.0 | 33.40 | 5.75 | 24.76 | 320 | 0.06 |
| 54 | - | 33.55 | 5.71 | | 30 | 15.0 | 33.41 | 5.75 | 24.77 | 319 | 0.10 |
| 78 | - | 33.37 | 5.83 | | 50 | 15.4 | 33.55 | 5.71 | 24.79 | 317 | 0.16 |
| 107 | - | 33.15 | 5.64 | | 75 | 14.3 | 33.44 | 5.83 | 24.94 | 302 | 0.24 |
| 158 | 9.42 | 33.48 | 4.29 | 213 | 100 | 12.3 | 33.16 | 5.71 | 25.13 | 285 | 0.31 |
| 208 | - | 33.93 | 3.34 | | 150 | 9.6 | 33.34 | 4.60 | 25.74 | 226 | 0.44 |
| 263 | 7.74 | 34.04 | 2.80 | 147 | 200 | 8.62 | 33.90 | 3.44 | 26.34 | 170 | 0.54 |
| 309 | 7.36 | 34.13 | 1.80 | 135 | 250 | 7.90 | 34.01 | 2.94 | 26.53 | 151 | 0.62 |
| 417 | 6.66 | 34.23 | 0.82 | 118 | 300 | 7.41 | 34.11 | 2.10 | 26.68 | 137 | 0.70 |
| 519 | 5.92 | 34.29 | 0.48 | 104 | 400 | 6.78 | 34.22 | 0.90 | 26.86 | 120 | 0.83 |
| 622 | 5.37 | 34.38 | 0.35 | 91 | 500 | 6.05 | 34.27 | 0.53 | 26.99 | 107 | 0.95 |
| 826 | 4.38 | 34.45 | 0.44 | 75 | 600 | 5.46 | 34.37 | 0.36 | 27.14 | 93 | 1.06 |
| 1032 | 3.77 | 34.52 | 0.68 | 64 | 700 | 4.99 | 34.41 | 0.35 | 27.23 | 85 | 1.16 |
| 1234 | 3.28 | 34.56 | 0.93 | 56 | 800 | 4.50 | 34.44 | 0.43 | 27.31 | 77 | 1.24 |
| | | | | | 1000 | 3.85 | 34.51 | 0.64 | 27.43 | 66 | 1.40 |
| CREST; April 10, 1952; 0611 GCT; 31°04.5'N, 116°26.5'W; sounding, 45 fm; wind, 300°, force 2; weather, overcast; sea, slight; wire angle, 04°. | | | | | | | | | | | 103.30 |
| 0 | 13.76 | 33.35 | 6.21 | 298 | 0 | 13.76 | 33.35 | 6.21 | 24.98 | 298 | 0.00 |
| 10 | 13.72 | 33.30 | 6.23 | 301 | 10 | 13.72 | 33.30 | 6.23 | 24.95 | 301 | 0.03 |
| 20 | 13.36 | 33.31 | 6.25 | 293 | 20 | 13.36 | 33.31 | 6.25 | 25.03 | 293 | 0.06 |
| 30 | 11.74 | 33.31 | 5.35 | 264 | 30 | 11.74 | 33.31 | 5.35 | 25.35 | 264 | 0.09 |
| 50 | 10.51 | 33.49 | 4.86 | 229 | 50 | 10.51 | 33.49 | 4.86 | 25.71 | 229 | 0.14 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **103.35** | CREST; April 10, 1952; 0843 GCT; 30°55.5'N, 116°45'W; sounding, 1050 fm; wind, 100°, force 1; weather, overcast; sea, smooth; wire angle, 05°. | | | | | | | | | | |
| 0 | - | 33.58 | 6.38 | | 0 | 14.8 | 33.58 | 6.38 | 24.94 | 302 | 0.00 |
| 10 | 14.41 | 33.62 | 6.43 | 291 | 10 | 14.41 | 33.62 | 6.43 | 25.06 | 291 | 0.03 |
| 25 | - | 33.58 | 5.91 | | 20 | 13.5 | 33.59 | 6.14 | 25.22 | 276 | 0.06 |
| 50 | 10.42 | 33.80 | 3.39 | 205 | 30 | 12.4 | 33.58 | 5.29 | 25.43 | 256 | 0.08 |
| 74 | - | 34.02 | 2.39 | | 50 | 10.42 | 33.80 | 3.39 | 25.96 | 205 | 0.13 |
| 98 | 9.17 | 34.09 | 2.28 | 164 | 75 | 9.3 | 34.03 | 2.39 | 26.33 | 170 | 0.18 |
| 151 | 8.78 | 34.14 | 1.92 | 154 | 100 | 9.13 | 34.09 | 2.25 | 26.41 | 163 | 0.22 |
| 196 | 8.42 | 34.18 | 1.71 | 146 | 150 | 8.78 | 34.14 | 1.93 | 26.50 | 154 | 0.30 |
| 243 | 8.23 | 34.25 | 1.21 | 138 | 200 | 8.40 | 34.19 | 1.66 | 26.60 | 145 | 0.38 |
| 289 | 7.60 | 34.23 | 1.15 | 130 | 250 | 8.18 | 34.25 | 1.15 | 26.68 | 137 | 0.45 |
| 389 | 7.02 | 34.31 | 0.57 | 117 | 300 | 7.49 | 34.23 | 1.14 | 26.76 | 129 | 0.52 |
| 485 | 6.18 | 34.33 | 0.38 | 105 | 400 | 6.92 | 34.31 | 0.54 | 26.91 | 115 | 0.65 |
| 589 | 5.62 | 34.36 | 0.32 | 96 | 500 | 6.08 | 34.33 | 0.36 | 27.03 | 103 | 0.76 |
| | | | | | 600 | (5.57) | (34.36) | | (27.12) | (95) | (0.87) |
| **103.40** | CREST; April 10, 1952; 1142 GCT; 30°46'N, 117°06'W; sounding, 910 fm; wind, 160°, force 3; weather, intermittent light drizzle; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 33.33 | 5.75 | | 0 | 15.3 | 33.33 | 5.75 | 24.64 | 331 | 0.00 |
| 10 | 15.25 | 33.31 | 5.75 | 331 | 10 | 15.25 | 33.31 | 5.75 | 24.64 | 331 | 0.03 |
| 25 | - | 33.30 | 5.80 | | 20 | 14.4 | 33.30 | 5.78 | 24.81 | 315 | 0.07 |
| 50 | 13.81 | 33.28 | 5.85 | 304 | 30 | 13.9 | 33.29 | 5.82 | 24.91 | 305 | 0.10 |
| 75 | - | 33.28 | 4.97 | | 50 | 13.81 | 33.28 | 5.85 | 24.92 | 304 | 0.16 |
| 98 | 10.44 | 33.49 | 4.06 | 228 | 75 | 11.7 | 33.28 | 4.97 | 25.33 | 265 | 0.23 |
| 151 | 9.51 | 33.86 | 3.01 | 186 | 100 | 10.34 | 33.51 | 4.02 | 25.75 | 225 | 0.29 |
| 197 | 8.95 | 34.05 | 2.26 | 163 | 150 | 9.54 | 33.85 | 3.04 | 26.15 | 187 | 0.40 |
| 243 | 8.34 | 34.18 | 1.85 | 145 | 200 | 8.91 | 34.06 | 2.24 | 26.42 | 162 | 0.48 |
| 290 | 7.90 | 34.19 | 1.33 | 138 | 250 | 8.25 | 34.18 | 1.75 | 26.61 | 143 | 0.56 |
| 389 | 7.17 | 34.31 | 0.68 | 119 | 300 | 7.82 | 34.19 | 1.24 | 26.69 | 137 | 0.64 |
| 485 | 6.26 | 34.34 | 0.43 | 105 | 400 | 7.04 | 34.31 | 0.63 | 26.89 | 117 | 0.77 |
| 588 | 5.65 | 34.38 | 0.28 | 95 | 500 | 6.15 | 34.35 | 0.39 | 27.04 | 103 | 0.88 |
| | | | | | 600 | (5.57) | (34.38) | | (27.14) | (94) | (0.99) |
| **103.50** | CREST; April 10, 1952; 1644 GCT; 30°26'N, 117°45.5'W; sounding, 1450 fm; wind, 220°, force 4; weather, light rain; sea, moderate; wire angle, 18°. | | | | | | | | | | |
| 0 | - | 33.22 | 5.77 | | 0 | 15.1 | 33.22 | 5.77 | 24.60 | 335 | 0.00 |
| 9 | 14.95 | 33.28 | 5.69 | 327 | 10 | 14.9 | 33.28 | 5.70 | 24.69 | 326 | 0.03 |
| 23 | - | 33.28 | 5.94 | | 20 | 14.2 | 33.28 | 5.92 | 24.84 | 312 | 0.07 |
| 48 | 13.08 | 33.23 | 5.94 | 294 | 30 | 13.9 | 33.27 | 5.94 | 24.89 | 307 | 0.10 |
| 71 | - | 33.24 | 5.35 | | 50 | 13.0 | 33.23 | 5.92 | 25.04 | 293 | 0.16 |
| 94 | 10.72 | 33.19 | 4.63 | 255 | 75 | 12.0 | 33.24 | 5.24 | 25.24 | 273 | 0.23 |
| 144 | 9.45 | 33.77 | 3.24 | 192 | 100 | 10.50 | 33.19 | 4.47 | 25.48 | 251 | 0.29 |
| 187 | 8.87 | 33.95 | 2.73 | 170 | 150 | 9.35 | 33.80 | 3.14 | 26.14 | 188 | 0.40 |
| 233 | 8.43 | 34.13 | 2.07 | 150 | 200 | 8.73 | 34.01 | 2.57 | 26.41 | 163 | 0.49 |
| 278 | 8.05 | 34.18 | 1.48 | 140 | 250 | 8.29 | 34.15 | 1.83 | 26.58 | 146 | 0.57 |
| 375 | 6.93 | 34.22 | 0.88 | 122 | 300 | 7.79 | 34.20 | 1.30 | 26.70 | 135 | 0.65 |
| 468 | 6.29 | 34.23 | 0.48 | 113 | 400 | 6.71 | 34.22 | 0.74 | 26.87 | 119 | 0.78 |
| 570 | 5.84 | 34.31 | 0.35 | 102 | 500 | 6.13 | 34.25 | 0.40 | 26.97 | 110 | 0.90 |
| **103.60** | CREST; April 10, 1952; 2156 GCT; 30°06'N, 118°24.5'W; sounding, 1800 fm; wind, 250°, force 4; weather, partly cloudy; sea, rough; wire angle, 25°. | | | | | | | | | | |
| 0 | - | 33.51 | 5.64 | | 0 | 16.0 | 33.51 | 5.64 | 24.62 | 333 | 0.00 |
| 9 | 15.95 | 33.49 | 5.61 | 333 | 10 | 15.9 | 33.49 | 5.61 | 24.63 | 332 | 0.03 |
| 23 | - | 33.51 | 5.59 | | 20 | 15.8 | 33.51 | 5.60 | 24.67 | 328 | 0.07 |
| 45 | 15.36 | 33.51 | 5.51 | 319 | 30 | 15.6 | 33.51 | 5.56 | 24.71 | 324 | 0.10 |
| 68 | - | 33.58 | 5.61 | | 50 | 15.5 | 33.51 | 5.54 | 24.73 | 322 | 0.16 |
| 90 | 14.05 | 33.39 | 5.46 | 301 | 75 | 14.8 | 33.51 | 5.57 | 24.89 | 307 | 0.24 |
| 138 | 10.46 | 33.42 | 4.32 | 234 | 100 | 12.64 | 33.39 | 5.36 | 25.24 | 274 | 0.32 |
| 179 | 9.42 | 33.77 | 3.41 | 191 | 150 | 10.10 | 33.48 | 4.01 | 25.77 | 223 | 0.44 |
| 221 | 8.69 | 34.03 | 2.67 | 161 | 200 | 9.02 | 33.96 | 3.02 | 26.32 | 171 | 0.54 |
| 265 | 8.16 | 34.08 | 2.18 | 149 | 250 | 8.31 | 34.07 | 2.39 | 26.52 | 152 | 0.63 |
| 358 | 7.27 | 34.20 | 1.07 | 128 | 300 | 7.79 | 34.12 | 1.72 | 26.63 | 141 | 0.70 |
| 448 | 6.46 | 34.27 | 0.50 | 113 | 400 | 6.85 | 34.23 | 0.74 | 26.85 | 120 | 0.84 |
| 548 | 5.96 | 34.38 | 0.29 | 98 | 500 | 6.13 | 34.33 | 0.35 | 27.03 | 104 | 0.96 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; April 11, 1952; 0355 GCT; 29°46'N, 119°05.5'W; sounding, 1850 fm; wind, 280°, force 4; weather, rain; sea, rough; wire angle, 21°. 103.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.51 | 5.60 | | 0 | 16.0 | 33.51 | 5.60 | 24.62 | 333 | 0.00 |
| 9 | 15.89 | 33.51 | 5.64 | 330 | 10 | 15.9 | 33.51 | 5.65 | 24.65 | 330 | 0.03 |
| 23 | - | 33.51 | 5.67 | | 20 | 15.9 | 33.51 | 5.66 | 24.65 | 330 | 0.07 |
| 51 | 15.45 | 33.48 | 5.67 | 323 | 30 | 15.9 | 33.51 | 5.67 | 24.65 | 330 | 0.10 |
| 74 | - | 33.55 | 5.64 | | 50 | 15.5 | 33.48 | 5.67 | 24.71 | 324 | 0.17 |
| 102 | 14.70 | 33.46 | 5.63 | 309 | 75 | 15.4 | 33.55 | 5.64 | 24.79 | 317 | 0.25 |
| 151 | 10.91 | 33.75 | 4.44 | 217 | 100 | 15.0 | 33.46 | 5.63 | 24.81 | 315 | 0.33 |
| 199 | 9.41 | 33.86 | 3.36 | 184 | 150 | 10.97 | 33.74 | 4.69 | 25.82 | 219 | 0.46 |
| | | | | | 200 | (9.40) | (33.86) | (3.36) | (26.18) | (184) | (0.56) |

CREST; April 11, 1952; 0915 GCT; 29°27'N, 119°45'W; sounding, 2000 fm; wind, 280°, force 4; weather, partly cloudy; sea, rough; wire angle, 12°. 103.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.35 | 5.74 | | 0 | 15.4 | 33.35 | 5.74 | 24.63 | 332 | 0.00 |
| 10 | 15.37 | 33.35 | 5.77 | 331 | 10 | 15.37 | 33.35 | 5.77 | 24.64 | 331 | 0.03 |
| 25 | - | 33.35 | 5.77 | | 20 | 15.4 | 33.35 | 5.77 | 24.63 | 332 | 0.07 |
| 54 | 14.68 | 33.31 | 5.92 | 320 | 30 | 15.1 | 33.35 | 5.77 | 24.70 | 325 | 0.10 |
| 78 | - | 33.24 | 6.04 | | 50 | 14.8 | 33.32 | 5.88 | 24.74 | 321 | 0.16 |
| 106 | 12.11 | 33.24 | 5.39 | 275 | 75 | 14.2 | 33.24 | 6.03 | 24.81 | 315 | 0.24 |
| 157 | 9.80 | 33.64 | 3.78 | 207 | 100 | 12.4 | 33.24 | 5.64 | 25.17 | 281 | 0.32 |
| 207 | 8.94 | 33.98 | 2.98 | 168 | 150 | 9.98 | 33.56 | 3.94 | 25.85 | 216 | 0.44 |
| 262 | - | 34.11 | 2.36 | | 200 | 9.00 | 33.96 | 3.05 | 26.32 | 171 | 0.54 |
| 309 | 7.61 | 34.14 | 1.77 | 137 | 250 | 8.35 | 34.09 | 2.52 | 26.53 | 151 | 0.63 |
| 416 | 6.51 | 34.09 | 0.83 | 127 | 300 | 7.71 | 34.14 | 1.87 | 26.66 | 139 | 0.70 |
| 521 | 6.07 | 34.33 | 0.45 | 103 | 400 | 6.64 | 34.09 | 0.92 | 26.77 | 128 | 0.84 |
| 629 | 5.52 | 34.40 | 0.33 | 92 | 500 | 6.16 | 34.30 | 0.50 | 27.00 | 107 | 0.96 |
| | | | | | 600 | 5.66 | 34.39 | 0.35 | 27.13 | 94 | 1.07 |

CREST; April 11, 1952; 1726 GCT; 29°06'N, 120°25'W; sounding, 2050 fm; wind, 310°, force 5; weather, partly cloudy; sea, high; wire angle, 45°. 103.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.48 | 5.73 | | 0 | 15.4 | 33.48 | 5.73 | 24.73 | 322 | 0.00 |
| 7 | 15.48 | 33.49 | 5.64 | 323 | 10 | 15.5 | 33.49 | 5.66 | 24.72 | 323 | 0.03 |
| 21 | - | 33.49 | 5.78 | | 20 | 15.6 | 33.49 | 5.78 | 24.70 | 326 | 0.06 |
| 42 | 15.52 | 33.51 | 5.80 | 322 | 30 | 15.6 | 33.49 | 5.80 | 24.70 | 326 | 0.10 |
| 64 | - | 33.57 | 5.69 | | 50 | 15.6 | 33.53 | 5.78 | 24.73 | 323 | 0.16 |
| 84 | 13.43 | 33.24 | 5.67 | 300 | 75 | 14.0 | 33.29 | 5.67 | 24.89 | 307 | 0.24 |
| 121 | 9.96 | 33.30 | 4.74 | 235 | 100 | 12.2 | 33.25 | 5.34 | 25.21 | 276 | 0.32 |
| 155 | 9.03 | 33.62 | 4.08 | 196 | 150 | 9.13 | 33.52 | 4.18 | 25.96 | 205 | 0.44 |
| 190 | 8.58 | 33.95 | 3.52 | 165 | 200 | 8.44 | 33.98 | 3.34 | 26.43 | 161 | 0.53 |
| 227 | 8.08 | 34.04 | 2.88 | 151 | 250 | 7.84 | 34.08 | 2.56 | 26.60 | 145 | 0.61 |
| 301 | 7.32 | 34.14 | 1.88 | 133 | 300 | 7.35 | 34.14 | 1.90 | 26.71 | 134 | 0.68 |
| 386 | 6.55 | 34.22 | 0.86 | 117 | 400 | 6.40 | 34.24 | 0.76 | 26.92 | 114 | 0.81 |
| 476 | 5.82 | 34.34 | 0.44 | 100 | 500 | (5.65) | (34.36) | | (27.11) | (96) | (0.92) |

CREST; April 13, 1952; 0141 GCT; 30°25.5'N, 116°12'W; sounding, 340 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 20°. 107.32

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.26 | 6.12 | | 0 | 14.8 | 33.26 | 6.12 | 24.70 | 326 | 0.00 |
| 9 | 14.79 | 33.24 | 6.34 | 327 | 10 | 14.7 | 33.24 | 6.34 | 24.70 | 325 | 0.03 |
| 23 | - | 33.26 | 6.22 | | 20 | 13.5 | 33.25 | 6.26 | 24.96 | 301 | 0.06 |
| 47 | 11.10 | 33.40 | 4.98 | 246 | 30 | 12.3 | 33.28 | 6.10 | 25.22 | 276 | 0.09 |
| 69 | - | 33.68 | 3.35 | | 50 | 11.1 | 33.45 | 4.74 | 25.57 | 242 | 0.14 |
| 91 | - | 33.89 | 2.53 | | 75 | 10.5 | 33.75 | 3.00 | 25.91 | 210 | 0.20 |
| 136 | 9.85 | 34.04 | 2.15 | 178 | 100 | 10.4 | 33.93 | 2.44 | 26.07 | 195 | 0.25 |
| 175 | 9.60 | 34.23 | 1.40 | 160 | 150 | 9.72 | 34.08 | 1.82 | 26.30 | 173 | 0.35 |
| 216 | 9.56 | 34.29 | 1.12 | 155 | 200 | 9.57 | 34.27 | 1.22 | 26.47 | 157 | 0.43 |
| 257 | 9.47 | 34.33 | 0.88 | 151 | 250 | 9.48 | 34.32 | 0.91 | 26.53 | 151 | 0.51 |
| 304 | 8.52 | 34.34 | 0.80 | 135 | 300 | 8.60 | 34.34 | 0.80 | 26.68 | 137 | 0.58 |
| 350 | 7.67 | 34.33 | 0.73 | 124 | 400 | 6.96 | 34.34 | 0.43 | 26.93 | 114 | 0.72 |
| 395 | 7.04 | 34.34 | 0.45 | 115 | | | | | | | |
| 441 | 6.48 | 34.33 | 0.38 | 108 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 107.35 | CREST; April 12, 1952; 2335 GCT; 30°19'N, 116°21.5'W; sounding, 980 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 14°. | | | | | | | | | | |
| 0 | - | 33.28 | 5.92 | | 0 | 15.4 | 33.28 | 5.92 | 24.58 | 337 | 0.00 |
| 10 | 14.81 | 33.30 | 5.97 | 323 | 10 | 14.81 | 33.30 | 5.97 | 24.72 | 323 | 0.03 |
| 24 | - | 33.28 | 6.55 | | 20 | 14.7 | 33.28 | 6.43 | 24.73 | 322 | 0.07 |
| 48 | 11.32 | 33.41 | 4.56 | 249 | 30 | 13.6 | 33.30 | 6.00 | 24.98 | 299 | 0.10 |
| 73 | - | 33.56 | 3.87 | | 50 | 11.4 | 33.42 | 4.49 | 25.49 | 250 | 0.15 |
| 96 | 9.82 | 33.78 | 3.33 | 197 | 75 | 10.4 | 33.57 | 3.83 | 25.79 | 222 | 0.21 |
| 147 | 9.24 | 34.07 | 2.53 | 166 | 100 | 9.73 | 33.82 | 3.24 | 26.10 | 192 | 0.26 |
| 192 | 8.78 | 34.18 | 2.03 | 151 | 150 | 9.20 | 34.08 | 2.50 | 26.39 | 165 | 0.35 |
| 238 | 8.25 | 34.25 | 1.49 | 138 | 200 | 8.68 | 34.19 | 1.95 | 26.56 | 149 | 0.43 |
| 284 | 8.07 | 34.31 | 0.97 | 131 | 250 | 8.16 | 34.27 | 1.34 | 26.70 | 135 | 0.51 |
| 382 | 7.31 | 34.36 | 0.49 | 117 | 300 | 8.02 | 34.33 | 0.83 | 26.77 | 129 | 0.58 |
| 477 | 6.42 | 34.36 | 0.36 | 105 | 400 | 7.12 | 34.36 | 0.44 | 26.92 | 114 | 0.70 |
| 579 | 5.66 | 34.39 | 0.29 | 94 | 500 | 6.23 | 34.36 | 0.34 | 27.04 | 103 | 0.82 |
| | | | | | 600 | (5.52) | (34.40) | | (27.16) | (92) | (0.92) |
| 107.40 | CREST; April 12, 1952; 2004 GCT; 30°05.5'N, 116°43'W; sounding, 1300 fm; wind, 310°, force 2; weather, overcast; sea, rough; wire angle, 18°. | | | | | | | | | | |
| 0 | - | 33.30 | 6.05 | | 0 | 15.1 | 33.30 | 6.05 | 24.66 | 329 | 0.00 |
| 9 | 14.49 | 33.30 | 6.14 | 316 | 10 | 14.5 | 33.30 | 6.16 | 24.79 | 317 | 0.03 |
| 23 | - | 33.30 | 6.22 | | 20 | 14.3 | 33.30 | 6.22 | 24.83 | 313 | 0.06 |
| 48 | 11.16 | 33.37 | 4.47 | 249 | 30 | 13.8 | 33.31 | 6.10 | 24.94 | 302 | 0.09 |
| 71 | - | 33.51 | 3.75 | | 50 | 11.1 | 33.38 | 4.40 | 25.52 | 247 | 0.15 |
| 94 | 9.68 | 33.71 | 3.32 | 200 | 75 | 10.1 | 33.54 | 3.67 | 25.82 | 219 | 0.21 |
| 142 | 9.36 | 34.07 | 2.42 | 168 | 100 | 9.63 | 33.78 | 3.22 | 26.08 | 194 | 0.26 |
| 184 | 9.00 | 34.20 | 1.73 | 153 | 150 | 9.28 | 34.10 | 2.29 | 26.39 | 165 | 0.35 |
| 228 | 8.68 | 34.27 | 1.32 | 143 | 200 | 8.87 | 34.23 | 1.56 | 26.56 | 149 | 0.43 |
| 272 | 8.30 | 34.29 | 1.06 | 136 | 250 | 8.51 | 34.29 | 1.19 | 26.66 | 139 | 0.51 |
| 366 | 7.30 | 34.29 | 0.64 | 122 | 300 | 7.99 | 34.29 | 0.93 | 26.74 | 131 | 0.58 |
| 456 | 6.41 | 34.31 | 0.41 | 109 | 400 | 6.94 | 34.29 | 0.54 | 26.89 | 117 | 0.71 |
| 556 | 5.85 | 34.34 | 0.36 | 100 | 500 | 6.11 | 34.32 | 0.38 | 27.02 | 104 | 0.82 |
| 107.50 | CREST; April 12, 1952; 1500 GCT; 29°48.5'N, 117°23'W; sounding, 1500 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 13°. | | | | | | | | | | |
| 0 | - | 33.28 | 5.92 | | 0 | 15.0 | 33.28 | 5.92 | 24.67 | 328 | 0.00 |
| 10 | 14.95 | 33.26 | 6.15 | 329 | 10 | 14.95 | 33.26 | 6.15 | 24.66 | 329 | 0.03 |
| 24 | - | 33.28 | 5.90 | | 20 | 14.9 | 33.28 | 5.93 | 24.69 | 326 | 0.07 |
| 48 | 13.86 | 33.25 | 6.86 | 308 | 30 | 14.9 | 33.28 | 6.01 | 24.69 | 326 | 0.10 |
| 73 | - | 33.21 | 5.53 | | 50 | 13.9 | 33.24 | 6.85 | 24.87 | 309 | 0.16 |
| 96 | 11.99 | 33.30 | 5.62 | 269 | 75 | 13.2 | 33.21 | 5.54 | 24.99 | 298 | 0.24 |
| 146 | 9.65 | 33.68 | 3.54 | 201 | 100 | 11.79 | 33.33 | 5.60 | 25.35 | 263 | 0.31 |
| 191 | 8.97 | 33.97 | 2.75 | 170 | 150 | 9.59 | 33.71 | 3.44 | 26.03 | 198 | 0.43 |
| 236 | 8.45 | 34.11 | 2.48 | 151 | 200 | 8.85 | 34.01 | 2.68 | 26.39 | 165 | 0.52 |
| 280 | 8.15 | 34.20 | 1.61 | 140 | 250 | 8.34 | 34.14 | 2.31 | 26.57 | 148 | 0.60 |
| 378 | 7.54 | 34.34 | 0.60 | 121 | 300 | 8.03 | 34.25 | 1.31 | 26.70 | 135 | 0.67 |
| 472 | 6.56 | 34.33 | 0.40 | 109 | 400 | 7.34 | 34.34 | 0.51 | 26.87 | 119 | 0.80 |
| 575 | 5.86 | 34.34 | 0.33 | 100 | 500 | 6.34 | 34.33 | 0.37 | 27.00 | 107 | 0.92 |
| | | | | | 600 | (5.71) | (34.34) | | (27.09) | (98) | (1.03) |
| 107.60 | CREST; April 12, 1952; 1003 GCT; 29°32'N, 118°03'W; sounding, 1780 fm; wind, 310°, force 4; weather, overcast; sea, very rough; wire angle, 19°. | | | | | | | | | | |
| 0 | - | 33.60 | 5.61 | | 0 | 16.1 | 33.60 | 5.61 | 24.67 | 328 | 0.00 |
| 9 | 16.12 | 33.60 | 5.67 | 329 | 10 | 16.1 | 33.60 | 5.67 | 24.67 | 328 | 0.03 |
| 23 | - | 33.60 | 5.65 | | 20 | 16.1 | 33.60 | 5.66 | 24.67 | 328 | 0.07 |
| 48 | 15.92 | 33.61 | 5.70 | 324 | 30 | 16.1 | 33.60 | 5.66 | 24.67 | 328 | 0.10 |
| 71 | - | 33.63 | 5.67 | | 50 | 15.9 | 33.61 | 5.70 | 24.72 | 323 | 0.16 |
| 94 | 15.79 | 33.66 | 5.56 | 317 | 75 | 15.8 | 33.64 | 5.66 | 24.77 | 319 | 0.24 |
| 141 | 11.04 | 33.51 | 4.37 | 237 | 100 | 15.81 | 33.66 | 5.52 | 24.78 | 318 | 0.32 |
| 185 | 9.47 | 33.75 | 3.80 | 193 | 150 | 10.67 | 33.52 | 4.22 | 25.70 | 230 | 0.46 |
| 229 | 8.64 | 34.02 | 2.81 | 161 | 200 | 9.12 | 33.89 | 3.47 | 26.25 | 178 | 0.57 |
| 273 | 8.24 | 34.13 | 2.11 | 147 | 250 | 8.42 | 34.09 | 2.46 | 26.52 | 152 | 0.65 |
| 367 | 7.52 | 34.22 | 0.93 | 130 | 300 | 8.08 | 34.18 | 1.68 | 26.64 | 141 | 0.73 |
| 461 | 6.38 | 34.22 | 0.70 | 115 | 400 | 7.02 | 34.22 | 0.83 | 26.82 | 123 | 0.87 |
| 561 | 6.12 | 34.33 | 0.38 | 104 | 500 | 6.24 | 34.25 | 0.55 | 26.95 | 111 | 0.99 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; April 12, 1952; 0502 GCT; 29°13.5'N, 118°45'W; sounding, 1800 fm; wind, 350°, force 3; weather, cloudy; sea, very rough; wire angle, 03°. | | | | | | | | | | | 107.70 |
| 0 | - | 33.49 | 5.72 | | 0 | 16.1 | 33.49 | 5.72 | 24.58 | 336 | 0.00 |
| 10 | 16.10 | 33.48 | 5.74 | 337 | 10 | 16.10 | 33.48 | 5.74 | 24.58 | 337 | 0.03 |
| 25 | - | 33.49 | 5.64 | | 20 | 16.0 | 33.49 | 5.66 | 24.61 | 334 | 0.07 |
| 50 | 15.62 | 33.55 | 5.75 | 322 | 30 | 16.0 | 33.50 | 5.65 | 24.62 | 333 | 0.10 |
| 75 | - | 33.60 | 5.69 | | 50 | 15.62 | 33.55 | 5.75 | 24.74 | 322 | 0.17 |
| 98 | 15.27 | 33.62 | 5.47 | 309 | 75 | 15.4 | 33.60 | 5.69 | 24.83 | 313 | 0.25 |
| 149 | 10.26 | 33.46 | 4.34 | 228 | 100 | 15.22 | 33.62 | 5.43 | 24.88 | 308 | 0.32 |
| 195 | 10.21 | 34.02 | 2.18 | 185 | 150 | 10.26 | 33.46 | 4.30 | 25.73 | 228 | 0.46 |
| 241 | 8.61 | 34.04 | 2.58 | 159 | 200 | 10.15 | 34.03 | 2.20 | 26.19 | 184 | 0.56 |
| | | | | | 250 | (8.50) | (34.05) | (2.58) | (26.47) | (157) | (0.65) |
| CREST; April 11, 1952; 2343 GCT; 28°53'N, 119°27.5'W; sounding, 2000 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | | 107.80 |
| 0 | - | 33.33 | 5.72 | | 0 | 15.5 | 33.33 | 5.72 | 24.60 | 335 | 0.00 |
| 10 | 15.32 | 33.35 | 5.74 | 330 | 10 | 15.32 | 33.35 | 5.74 | 24.65 | 330 | 0.03 |
| 25 | - | 33.33 | 5.75 | | 20 | 15.1 | 33.34 | 5.75 | 24.69 | 326 | 0.07 |
| 49 | 15.04 | 33.39 | 5.77 | 321 | 30 | 15.1 | 33.33 | 5.76 | 24.68 | 327 | 0.10 |
| 74 | - | 33.31 | 5.80 | | 50 | 15.0 | 33.39 | 5.77 | 24.75 | 320 | 0.16 |
| 98 | 12.64 | 33.22 | 5.66 | 287 | 75 | 14.5 | 33.30 | 5.80 | 24.79 | 317 | 0.24 |
| 148 | 9.95 | 33.51 | 4.37 | 219 | 100 | 12.55 | 33.22 | 5.63 | 25.12 | 285 | 0.32 |
| 195 | 9.17 | 33.94 | 3.30 | 175 | 150 | 9.91 | 33.51 | 4.33 | 25.83 | 218 | 0.45 |
| 242 | 8.61 | 34.09 | 2.70 | 155 | 200 | 9.08 | 33.97 | 3.21 | 26.32 | 171 | 0.55 |
| 288 | 8.74 | 34.31 | 1.30 | 141 | 250 | 8.64 | 34.15 | 2.40 | 26.53 | 151 | 0.63 |
| 386 | 7.54 | 34.33 | 0.60 | 122 | 300 | 8.66 | 34.31 | 1.15 | 26.65 | 140 | 0.70 |
| 482 | 6.68 | 34.38 | 0.39 | 107 | 400 | 7.36 | 34.34 | 0.54 | 26.87 | 119 | 0.84 |
| 586 | 6.02 | 34.42 | 0.28 | 96 | 500 | 6.58 | 34.39 | 0.36 | 27.02 | 105 | 0.96 |
| | | | | | 600 | (5.91) | (34.42) | | (27.13) | (95) | (1.07) |
| CREST; April 13, 1952; 0622 GCT; 29°49.5'N, 115°54'W; sounding, 60 fm; wind, 010°, force 4; weather, overcast; sea, slight; wire angle, 16°. | | | | | | | | | | | 110.33 |
| 0 | 13.82 | 33.28 | 6.14 | 305 | 0 | 13.82 | 33.28 | 6.14 | 24.92 | 305 | 0.00 |
| 10 | 13.79 | 33.33 | 6.24 | 300 | 10 | 13.79 | 33.33 | 6.24 | 24.96 | 300 | 0.03 |
| 19 | 13.30 | 33.28 | 6.17 | 295 | 20 | 13.00 | 33.28 | 6.14 | 25.08 | 289 | 0.06 |
| 28 | 11.40 | 33.55 | 3.94 | 240 | 30 | 11.34 | 33.57 | 3.90 | 25.62 | 238 | 0.09 |
| 48 | 10.96 | 33.65 | 3.36 | 225 | 50 | 10.93 | 33.66 | 3.31 | 25.77 | 224 | 0.13 |
| 72 | 10.40 | 33.78 | 2.88 | 206 | 75 | (10.35) | (33.79) | (2.85) | (25.97) | (205) | (0.19) |
| CREST; April 13, 1952; 0747 GCT; 29°46.5'N, 116°00'W; sounding, 700 fm; wind, 340°, force 4; weather, cloudy; sea, slight; wire angle, 28°. | | | | | | | | | | | 110.35 |
| 0 | - | 33.25 | 6.03 | | 0 | 14.7 | 33.25 | 6.03 | 24.71 | 324 | 0.00 |
| 9 | 14.62 | 33.30 | 6.11 | 319 | 10 | 14.6 | 33.30 | 6.11 | 24.77 | 319 | 0.03 |
| 22 | - | 33.26 | 6.01 | | 20 | 14.6 | 33.26 | 6.01 | 24.74 | 322 | 0.06 |
| 44 | - | 33.31 | 6.35 | | 30 | 14.6 | 33.27 | 6.14 | 24.75 | 321 | 0.10 |
| 66 | - | 33.60 | 3.71 | | 50 | 12.6 | 33.38 | 6.20 | 25.24 | 274 | 0.16 |
| 87 | - | 33.87 | 2.19 | | 75 | 10.6 | 33.73 | 2.93 | 25.88 | 213 | 0.22 |
| 131 | 10.14 | 34.09 | 1.72 | 179 | 100 | 10.5 | 33.95 | 1.95 | 26.07 | 195 | 0.27 |
| 170 | - | 34.23 | 1.47 | | 150 | 10.05 | 34.15 | 1.61 | 26.30 | 173 | 0.36 |
| 209 | 9.68 | 34.31 | 1.02 | 155 | 200 | 9.79 | 34.30 | 1.15 | 26.46 | 158 | 0.45 |
| 333 | 8.04 | 34.42 | 0.47 | 122 | 250 | 9.26 | 34.36 | 0.74 | 26.60 | 145 | 0.52 |
| 416 | 7.41 | 34.42 | 0.50 | 114 | 300 | 8.52 | 34.41 | 0.54 | 26.75 | 130 | 0.60 |
| 505 | 6.51 | 34.40 | 0.31 | 103 | 400 | 7.54 | 34.42 | 0.50 | 26.91 | 116 | 0.73 |
| 592 | 6.00 | 34.40 | 0.29 | 97 | 500 | 6.55 | 34.40 | 0.31 | 27.03 | 104 | 0.84 |
| 685 | 5.28 | 34.42 | 0.32 | 87 | 600 | 5.94 | 34.40 | 0.29 | 27.11 | 96 | 0.95 |
| 874 | 4.46 | 34.42 | 0.46 | 78 | 700 | 5.18 | 34.42 | 0.33 | 27.22 | 86 | 1.05 |
| | | | | | 800 | 4.70 | 34.42 | 0.41 | 27.27 | 81 | 1.14 |

S10

CCOFI 5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **I10.40** | CREST; April 13, 1952; 1057 GCT; 29°36.5'N, 116°19.5'W; sounding, 1300 fm; wind, 340°, force 4; weather, cloudy; sea, slight; wire angle, 17°. | | | | | | | | | | |
| 0 | - | 33.24 | 5.84 | | 0 | 15.3 | 33.24 | 5.84 | 24.57 | 337 | 0.00 |
| 10 | - | 33.26 | 5.86 | | 10 | 15.3 | 33.26 | 5.86 | 24.59 | 336 | 0.03 |
| 24 | 15.15 | 33.31 | 5.99 | 329 | 20 | 15.2 | 33.31 | 5.97 | 24.65 | 330 | 0.07 |
| 53 | - | 33.22 | 5.54 | | 30 | 15.0 | 33.30 | 5.96 | 24.68 | 327 | 0.10 |
| 77 | 10.64 | 33.40 | 4.31 | 238 | 50 | 13.0 | 33.22 | 5.62 | 25.04 | 293 | 0.16 |
| 104 | 10.13 | 33.65 | 3.46 | 211 | 75 | 10.7 | 33.39 | 4.40 | 25.60 | 240 | 0.23 |
| 153 | 9.30 | 33.96 | 2.77 | 175 | 100 | 10.21 | 33.62 | 3.58 | 25.86 | 215 | 0.29 |
| 201 | 8.72 | 34.18 | 1.90 | 150 | 150 | 9.35 | 33.94 | 2.81 | 26.25 | 178 | 0.39 |
| | | | | | 200 | 8.73 | 34.17 | 1.94 | 26.53 | 151 | 0.47 |
| **I10.50** | CREST; April 13, 1952; 1610 GCT; 29°16.5'N, 116°59'W; sounding, 1700 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 28°. | | | | | | | | | | |
| 0 | - | 33.31 | 5.83 | | 0 | 15.2 | 33.31 | 5.83 | 24.65 | 330 | 0.00 |
| 9 | 15.17 | 33.31 | 5.87 | 330 | 10 | 15.1 | 33.31 | 5.87 | 24.67 | 328 | 0.03 |
| 22 | - | 33.37 | 5.87 | | 20 | 15.1 | 33.37 | 5.87 | 24.72 | 324 | 0.07 |
| 49 | - | 33.37 | 5.87 | | 30 | 15.0 | 33.37 | 5.87 | 24.74 | 322 | 0.10 |
| 70 | - | 33.37 | 5.32 | | 50 | 14.0 | 33.37 | 5.87 | 24.95 | 302 | 0.16 |
| 96 | - | 33.48 | 4.17 | | 75 | 12.3 | 33.37 | 5.11 | 25.29 | 269 | 0.23 |
| 139 | 9.90 | 33.79 | 3.29 | 197 | 100 | 10.8 | 33.51 | 4.00 | 25.67 | 233 | 0.30 |
| 181 | 9.50 | 34.02 | 2.69 | 174 | 150 | 9.74 | 33.86 | 3.13 | 26.13 | 190 | 0.40 |
| 228 | 8.79 | 34.12 | 2.02 | 156 | 200 | 9.09 | 34.07 | 2.42 | 26.40 | 164 | 0.49 |
| 268 | 8.44 | 34.18 | 1.51 | 146 | 250 | 8.59 | 34.15 | 1.73 | 26.54 | 151 | 0.57 |
| 360 | 7.61 | 34.34 | 0.84 | 122 | 300 | 8.18 | 34.27 | 1.22 | 26.69 | 136 | 0.65 |
| 449 | 6.70 | 34.29 | 0.50 | 114 | 400 | 7.13 | 34.32 | 0.65 | 26.89 | 117 | 0.78 |
| 540 | 6.16 | 34.33 | 0.38 | 104 | 500 | 6.40 | 34.31 | 0.41 | 26.98 | 109 | 0.90 |
| 721 | 5.10 | 34.42 | 0.34 | 85 | 600 | 5.81 | 34.37 | 0.36 | 27.10 | 97 | 1.01 |
| 910 | 4.28 | 34.47 | 0.53 | 73 | 700 | 5.22 | 34.41 | 0.34 | 27.20 | 87 | 1.11 |
| 1099 | 3.75 | 34.51 | 0.67 | 65 | 800 | 4.71 | 34.44 | 0.40 | 27.29 | 80 | 1.20 |
| | | | | | 1000 | 4.01 | 34.49 | 0.60 | 27.40 | 69 | 1.37 |
| **I10.60** | CREST; April 13, 1952; 2113 GCT; 28°53.5'N, 117°38'W; sounding, 1950 fm; wind, 330°, force 4; weather, overcast; sea, moderate; wire angle, 19°. | | | | | | | | | | |
| 0 | - | 33.55 | 5.74 | | 0 | 16.0 | 33.55 | 5.74 | 24.65 | 330 | 0.00 |
| 9 | 15.92 | 33.51 | 5.74 | 331 | 10 | 15.9 | 33.51 | 5.73 | 24.65 | 330 | 0.03 |
| 23 | - | 33.55 | 5.70 | | 20 | 15.9 | 33.55 | 5.70 | 24.68 | 328 | 0.07 |
| 52 | 15.54 | 33.55 | 5.72 | 320 | 30 | 15.8 | 33.55 | 5.70 | 24.70 | 325 | 0.10 |
| 76 | - | 33.51 | 5.70 | | 50 | 15.6 | 33.55 | 5.71 | 24.74 | 321 | 0.16 |
| 103 | 13.65 | 33.44 | 5.18 | 290 | 75 | 15.2 | 33.51 | 5.70 | 24.80 | 316 | 0.24 |
| 151 | 11.40 | 34.00 | 2.48 | 207 | 100 | 13.8 | 33.44 | 5.34 | 25.04 | 292 | 0.32 |
| 199 | 10.38 | 34.18 | 1.83 | 176 | 150 | 11.41 | 33.98 | 2.50 | 25.93 | 208 | 0.45 |
| 252 | 9.31 | 34.25 | 1.54 | 154 | 200 | 10.37 | 34.18 | 1.81 | 26.27 | 176 | 0.55 |
| 298 | 8.86 | 34.25 | 1.36 | 147 | 250 | 9.34 | 34.25 | 1.54 | 26.50 | 154 | 0.63 |
| 401 | 7.45 | 34.29 | 0.72 | 124 | 300 | 8.84 | 34.25 | 1.35 | 26.58 | 147 | 0.71 |
| 503 | 6.53 | 34.30 | 0.43 | 111 | 400 | 7.47 | 34.29 | 0.75 | 26.81 | 124 | 0.85 |
| 608 | 5.94 | 34.38 | 0.30 | 98 | 500 | 6.56 | 34.30 | 0.44 | 26.95 | 112 | 0.97 |
| | | | | | 600 | 5.96 | 34.38 | 0.30 | 27.09 | 98 | 1.09 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; April 14, 1952; 0211 GCT; 28°36'N, 118°18'W; sounding, 1800 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | | 110.70 |
| 0 | - | 33.51 | 5.68 | | 0 | 16.0 | 33.51 | 5.68 | 24.62 | 333 | 0.00 |
| 9 | 15.98 | 33.51 | 5.45 | 332 | 10 | 16.0 | 33.51 | 5.45 | 24.62 | 333 | 0.03 |
| 23 | - | 33.51 | 5.72 | | 20 | 16.0 | 33.51 | 5.69 | 24.62 | 333 | 0.07 |
| 52 | - | 33.49 | 5.75 | | 30 | 15.9 | 33.51 | 5.73 | 24.65 | 330 | 0.10 |
| 75 | - | 33.46 | 5.78 | | 50 | 15.3 | 33.49 | 5.74 | 24.76 | 319 | 0.16 |
| 103 | - | 33.31 | 5.72 | | 75 | 15.0 | 33.46 | 5.78 | 24.81 | 315 | 0.24 |
| 150 | 11.01 | 33.51 | 4.21 | 236 | 100 | 14.0 | 33.31 | 5.74 | 24.90 | 306 | 0.32 |
| 196 | - | 33.78 | 3.53 | | 150 | 11.01 | 33.51 | 4.21 | 25.63 | 236 | 0.46 |
| 249 | 8.95 | 34.05 | 2.46 | 163 | 200 | 9.42 | 33.80 | 3.41 | 26.13 | 189 | 0.57 |
| 293 | 8.14 | 34.09 | 2.33 | 148 | 250 | 8.93 | 34.06 | 2.45 | 26.41 | 162 | 0.66 |
| 394 | 7.02 | 34.22 | 0.91 | 123 | 300 | 8.03 | 34.09 | 2.27 | 26.58 | 147 | 0.74 |
| 491 | 6.39 | 34.32 | 0.45 | 108 | 400 | 6.97 | 34.23 | 0.86 | 26.84 | 122 | 0.88 |
| 590 | 6.00 | 34.38 | 0.34 | 99 | 500 | 6.35 | 34.33 | 0.44 | 27.00 | 107 | 1.00 |
| 786 | 4.91 | 34.45 | 0.40 | 81 | 600 | 5.94 | 34.39 | 0.35 | 27.10 | 97 | 1.11 |
| 987 | 4.16 | 34.51 | 0.57 | 69 | 700 | 5.39 | 34.43 | 0.36 | 27.20 | 88 | 1.21 |
| 1188 | 3.56 | 34.52 | 0.81 | 62 | 800 | 4.82 | 34.45 | 0.41 | 27.28 | 80 | 1.30 |
| | | | | | 1000 | 4.12 | 34.51 | 0.59 | 27.41 | 68 | 1.47 |
| CREST; April 14, 1952; 0730 GCT; 28°16.5'N, 118°57.5'W; sounding, 2050 fm; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 14°. | | | | | | | | | | | 110.80 |
| 0 | - | 33.60 | 5.66 | | 0 | 16.2 | 33.60 | 5.66 | 24.65 | 330 | 0.00 |
| 10 | 16.15 | 33.60 | 5.66 | 329 | 10 | 16.15 | 33.60 | 5.66 | 24.66 | 329 | 0.03 |
| 24 | - | 33.60 | 5.66 | | 20 | 16.1 | 33.60 | 5.66 | 24.67 | 328 | 0.07 |
| 53 | 16.14 | 33.64 | 5.69 | 326 | 30 | 16.1 | 33.62 | 5.67 | 24.68 | 327 | 0.10 |
| 77 | - | 33.64 | 5.69 | | 50 | 16.0 | 33.64 | 5.69 | 24.72 | 323 | 0.16 |
| 105 | 14.20 | 33.53 | 5.12 | 294 | 75 | 15.5 | 33.64 | 5.69 | 24.83 | 312 | 0.24 |
| 154 | 11.14 | 33.78 | 3.41 | 219 | 100 | 14.5 | 33.53 | 5.37 | 24.97 | 300 | 0.32 |
| 206 | 10.44 | 34.20 | 1.91 | 176 | 150 | 11.29 | 33.72 | 3.63 | 25.75 | 226 | 0.45 |
| 260 | 9.48 | 34.33 | 1.38 | 151 | 200 | 10.51 | 34.18 | 2.00 | 26.24 | 178 | 0.56 |
| 307 | 8.92 | 34.37 | 0.87 | 139 | 250 | 9.63 | 34.31 | 1.46 | 26.50 | 155 | 0.64 |
| 414 | 7.88 | 34.39 | 0.46 | 122 | 300 | 8.97 | 34.37 | 0.96 | 26.65 | 140 | 0.72 |
| 517 | 6.68 | 34.38 | 0.36 | 107 | 400 | 8.05 | 34.39 | 0.49 | 26.81 | 125 | 0.86 |
| 624 | 5.83 | 34.41 | 0.28 | 94 | 500 | 6.88 | 34.38 | 0.38 | 26.97 | 110 | 0.98 |
| | | | | | 600 | 5.97 | 34.40 | 0.29 | 27.10 | 97 | 1.09 |
| CREST; April 14, 1952; 1241, 1307 GCT; 27°57.5'N, 119°35'W; sounding, 2100 fm; wind, 360°, force 5; weather, partly cloudy; sea, rough; wire angle, 15°, 18°. | | | | | | | | | | | 110.90 |
| 0 | - | 33.66 | 5.45 | | 0 | 16.3 | 33.66 | 5.45 | 24.67 | 328 | 0.00 |
| 9 | 16.27 | 33.66 | 5.57 | 327 | 10 | 16.3 | 33.66 | 5.58 | 24.67 | 328 | 0.03 |
| 24 | - | 33.69 | 5.59 | | 20 | 16.2 | 33.69 | 5.59 | 24.72 | 324 | 0.07 |
| 48 | - | 33.68 | 5.55 | | 30 | 16.2 | 33.69 | 5.58 | 24.72 | 324 | 0.10 |
| 72 | - | 33.68 | 5.55 | | 50 | 16.2 | 33.68 | 5.55 | 24.71 | 325 | 0.16 |
| 96 | - | 33.62 | 5.24 | | 75 | 15.6 | 33.68 | 5.55 | 24.84 | 312 | 0.24 |
| 148 | 12.04 | 33.89 | 3.12 | 226 | 100 | 15.4 | 33.62 | 5.19 | 24.84 | 312 | 0.32 |
| 194 | - | 34.22 | 1.67 | | 150 | 12.01 | 33.91 | 3.02 | 25.76 | 224 | 0.46 |
| 241 | 10.72 | 34.38 | 1.17 | 167 | 200 | 11.31 | 34.25 | 1.61 | 26.16 | 187 | 0.56 |
| | | | | | 250 | 10.56 | 34.41 | 1.09 | 26.41 | 162 | 0.65 |
| 269 | 10.27 | 34.45 | 0.91 | 154 | 300 | 9.81 | 34.45 | 0.77 | 26.57 | 147 | 0.73 |
| 365 | 8.92 | 34.42 | 0.65 | 135 | 400 | 8.29 | 34.42 | 0.51 | 26.80 | 126 | 0.88 |
| 456 | 7.54 | 34.42 | 0.34 | 116 | 500 | 7.20 | 34.42 | 0.42 | 26.96 | 111 | 1.00 |
| 550 | 6.85 | 34.42 | 0.50 | 106 | 600 | 6.42 | 34.43 | 0.46 | 27.07 | 100 | 1.12 |
| 737 | 5.27 | 34.46 | 0.27 | 84 | 700 | 5.56 | 34.45 | 0.30 | 27.19 | 88 | 1.22 |
| 924 | 4.38 | 34.47 | 0.47 | 74 | 800 | 4.85 | 34.46 | 0.30 | 27.29 | 80 | 1.31 |
| 1123 | 3.79 | 34.51 | 0.75 | 65 | 1000 | 4.16 | 34.48 | 0.57 | 27.38 | 71 | 1.48 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **113.30** | BLACK DOUGLAS; April 15, 1952; 1640 GCT; 29°22.5'N, 115°17.5'W; sounding, 32 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 12.61 | 33.62 | 5.24a) | 257 | 0 | 12.61 | 33.62 | 5.24 | 25.42 | 257 | 0.00 |
| 10 | 12.44 | 33.71 | 5.24 | 247 | 10 | 12.44 | 33.71 | 5.24 | 25.52 | 247 | 0.03 |
| 20 | 12.20 | 33.62 | 4.70 | 249 | 20 | 12.20 | 33.62 | 4.70 | 25.50 | 249 | 0.05 |
| 30 | 12.14 | 33.64 | 4.39 | 247 | 30 | 12.14 | 33.64 | 4.39 | 25.53 | 247 | 0.07 |
| 50 | 11.46 | 33.73 | 2.78 | 228 | 50 | 11.46 | 33.73 | 2.78 | 25.72 | 228 | 0.12 |
| **113.35** | BLACK DOUGLAS; April 15, 1952; 1210 GCT; 29°12'N, 115°39'W; sounding, 600 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 26°. | | | | | | | | | | |
| 0 | - | 33.31 | 6.76b) | | 0 | 14.6 | 33.31 | 6.76 | 24.78 | 318 | 0.00 |
| 9 | 14.52 | 33.30 | 6.69 | 317 | 10 | 14.5 | 33.30 | 6.69 | 24.79 | 317 | 0.03 |
| 22 | - | 33.31 | 6.75 | | 20 | 14.5 | 33.31 | 6.73 | 24.80 | 316 | 0.06 |
| 49 | 14.04 | 33.35 | 6.79 | 304 | 30 | 14.5 | 33.32 | 6.79 | 24.81 | 315 | 0.10 |
| 71 | - | 33.39 | 5.35 | | 50 | 14.0 | 33.35 | 6.78 | 24.93 | 303 | 0.16 |
| 95 | 10.42 | 33.55 | 4.66 | 223 | 75 | 10.9 | 33.40 | 5.17 | 25.57 | 243 | 0.23 |
| 135 | 9.67 | 33.91 | 3.62 | 185 | 100 | 10.28 | 33.61 | 4.53 | 25.84 | 217 | 0.28 |
| 173 | 8.95 | 34.09 | 2.86 | 160 | 150 | 9.28 | 33.99 | 3.26 | 26.30 | 173 | 0.38 |
| 217 | 9.36 | 34.34 | 1.22 | 148 | 200 | 9.16 | 34.30 | 1.47 | 26.56 | 148 | 0.46 |
| 255 | 8.52 | 34.33 | 1.20 | 136 | 250 | 8.65 | 34.33 | 1.20 | 26.67 | 138 | 0.54 |
| 347 | 7.86 | 34.38 | 0.65 | 123 | 300 | 8.17 | 34.35 | 1.05 | 26.76 | 130 | 0.61 |
| 440 | 7.08 | 34.40 | 0.46 | 111 | 400 | 7.44 | 34.40 | 0.53 | 26.91 | 116 | 0.74 |
| 542 | 6.13 | 34.38 | 0.35 | 100 | 500 | 6.52 | 34.39 | 0.40 | 27.02 | 104 | 0.85 |
| **113.40** | BLACK DOUGLAS; April 15, 1952; 0655 GCT; 29°02'N, 115°58.5'W; sounding, 950 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | - | 33.42 | 6.72 | | 0 | 15.3 | 33.42 | 6.72 | 24.71 | 324 | 0.00 |
| 9 | 15.28 | 33.42 | 6.70 | 324 | 10 | 15.3 | 33.42 | 6.69 | 24.71 | 324 | 0.03 |
| 23 | - | 33.42 | 6.66 | | 20 | 15.3 | 33.42 | 6.67 | 24.71 | 324 | 0.06 |
| 52 | 14.22 | 33.39 | 6.78 | 304 | 30 | 15.2 | 33.41 | 6.68 | 24.72 | 323 | 0.10 |
| 75 | - | 33.40 | 5.24 | | 50 | 14.6 | 33.39 | 6.78 | 24.84 | 312 | 0.16 |
| 102 | 10.45 | 33.60 | 4.55 | 220 | 75 | 11.7 | 33.40 | 5.24 | 25.42 | 256 | 0.23 |
| 150 | 9.46 | 33.91 | 3.46 | 181 | 100 | 10.5 | 33.57 | 4.60 | 25.77 | 223 | 0.29 |
| 197 | 8.91 | 34.05 | 2.84 | 163 | 150 | 9.46 | 33.91 | 3.46 | 26.21 | 181 | 0.40 |
| 249 | 8.52 | 34.19 | 2.12 | 147 | 200 | 8.90 | 34.07 | 2.78 | 26.43 | 161 | 0.48 |
| 293 | 7.92 | 34.19 | 1.96 | 138 | 250 | 8.51 | 34.19 | 2.12 | 26.58 | 146 | 0.56 |
| 396 | 7.14 | 34.31 | 0.75 | 118 | 300 | 7.87 | 34.19 | 1.93 | 26.68 | 137 | 0.63 |
| 499 | 6.40 | 34.38 | 0.46 | 104 | 400 | 7.12 | 34.31 | 0.72 | 26.88 | 118 | 0.77 |
| 607 | 5.62 | 34.40 | 0.39 | 93 | 500 | 6.37 | 34.38 | 0.46 | 27.04 | 103 | 0.89 |
| | | | | | 600 | 5.67 | 34.40 | 0.40 | 27.14 | 93 | 0.99 |
| **113.60** | BLACK DOUGLAS; April 14, 1952; 1414 GCT; 28°21'N, 117°18.5'W; sounding, 2100 fm; wind, 340°, force 6; weather, cloudy; sea, very rough; wire angle, 22°. | | | | | | | | | | |
| 0 | - | - | 6.66 | | 0 | 15.3 | (33.40) | 6.66 | (24.69) | (326) | (0.00) |
| 9 | 15.26 | 33.40 | 6.64 | 325 | 10 | 15.3 | 33.40 | 6.67 | 24.69 | 326 | 0.03 |
| 23 | - | 33.40 | 6.82 | | 20 | 15.3 | 33.40 | 6.81 | 24.69 | 326 | 0.07 |
| 51 | 14.26 | 33.28 | 6.82 | 313 | 30 | 15.3 | 33.38 | 6.82 | 24.68 | 327 | 0.10 |
| 73 | - | 33.25 | 6.31 | | 50 | 14.4 | 33.29 | 6.82 | 24.80 | 315 | 0.16 |
| 98 | 12.61 | 33.24 | 6.60 | 285 | 75 | 13.4 | 33.25 | 6.32 | 24.98 | 299 | 0.24 |
| 141 | 10.70 | 33.61 | 4.60 | 224 | 100 | 12.48 | 33.24 | 6.60 | 25.15 | 282 | 0.31 |
| 183 | 9.16 | 33.86 | 3.98 | 181 | 150 | 10.45 | 33.68 | 4.47 | 25.87 | 214 | 0.44 |
| 231 | 8.86 | 34.16 | 2.79 | 154 | 200 | 9.04 | 33.95 | 3.58 | 26.31 | 172 | 0.54 |
| 271 | 8.22 | 34.16 | 2.25 | 144 | 250 | 8.70 | 34.16 | 2.57 | 26.53 | 151 | 0.62 |
| 368 | 7.32 | 34.27 | 0.95 | 124 | 300 | 7.84 | 34.18 | 1.58 | 26.67 | 138 | 0.69 |
| 466 | 6.70 | 34.32 | 0.58 | 112 | 400 | 7.10 | 34.28 | 0.79 | 26.86 | 120 | 0.83 |
| 571 | 6.12 | 34.38 | 0.39 | 100 | 500 | 6.50 | 34.34 | 0.50 | 26.99 | 108 | 0.95 |

a) All oxygen values for stations occupied by RV Black Douglas on Cruise 5204 appear to be approximately 15 per cent high.

b) The oxygen samples for this station were stored two days before titration.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| BLACK DOUGLAS; April 14, 1952; 0743 GCT; 28°02'N, 117°55.5'W; sounding, 1810 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 18°. | | | | | | | | | | | 113.70 |
| 0 | - | 33.52 | 6.51 | | 0 | 15.8 | 33.52 | 6.51 | 24.68 | 328 | 0.00 |
| 9 | 15.82 | 33.49 | 6.54 | 330 | 10 | 15.8 | 33.49 | 6.54 | 24.65 | 330 | 0.03 |
| 23 | - | 33.49 | 6.51 | | 20 | 15.8 | 33.49 | 6.51 | 24.65 | 330 | 0.07 |
| 47 | 15.29 | 33.46 | 6.69 | 321 | 30 | 15.8 | 33.49 | 6.56 | 24.65 | 330 | 0.10 |
| 71 | - | 33.40 | 6.61 | | 50 | 15.2 | 33.45 | 6.69 | 24.75 | 320 | 0.16 |
| 94 | 13.84 | 33.32 | 5.43 | 302 | 75 | 14.4 | 33.39 | 6.50 | 24.88 | 308 | 0.24 |
| 143 | 10.50 | 33.54 | 3.52 | 226 | 100 | 13.25 | 33.32 | 5.18 | 25.06 | 291 | 0.32 |
| 187 | 9.72 | 33.98 | 2.41 | 180 | 150 | 10.37 | 33.63 | 3.38 | 25.84 | 217 | 0.45 |
| 231 | 8.92 | 34.10 | 1.98 | 159 | 200 | 9.47 | 34.05 | 2.26 | 26.32 | 171 | 0.55 |
| 275 | 8.57 | 34.03u | 1.39 | | 250 | 8.73 | 34.12 | 1.70 | 26.49 | 155 | 0.63 |
| 372 | 7.98 | 34.34 | 0.80 | 128 | 300 | 8.42 | 34.24 | 1.23 | 26.63 | 141 | 0.71 |
| 465 | 7.02 | 34.36 | 0.44 | 113 | 400 | 7.72 | 34.35 | 0.67 | 26.83 | 123 | 0.84 |
| 566 | 6.16 | 34.38 | 0.34 | 101 | 500 | 6.70 | 34.37 | 0.39 | 26.98 | 108 | 0.97 |
| BLACK DOUGLAS; April 13, 1952; 0002 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 300°, force 5; weather, cloudy; sea, moderate; wire angle, 04°. | | | | | | | | | | | 117.26 |
| 0 | 14.99 | 33.62 | 6.82 | 303 | 0 | 14.99 | 33.62 | 6.82 | 24.93 | 303 | 0.00 |
| 10 | 14.90 | 33.60 | 6.86 | 303 | 10 | 14.90 | 33.60 | 6.86 | 24.94 | 303 | 0.03 |
| 20 | 14.30 | 33.57 | 7.02 | 293 | 20 | 14.30 | 33.57 | 7.02 | 25.04 | 293 | 0.06 |
| 30 | 12.56 | 33.57 | 5.20 | 259 | 30 | 12.56 | 33.57 | 5.20 | 25.39 | 259 | 0.09 |
| 50 | 10.96 | 33.64 | 4.06 | 226 | 50 | 10.96 | 33.64 | 4.06 | 25.74 | 226 | 0.14 |
| BLACK DOUGLAS; April 13, 1952; 0244 GCT; 28°48'N, 114°56.5'W; sounding, 57 fm; wind, 300°, force 5; weather, cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | | 117.30 |
| 0 | 15.34 | 33.60 | 6.75 | 312 | 0 | 15.34 | 33.60 | 6.75 | 24.84 | 312 | 0.00 |
| 10 | 15.34 | 33.63 | 6.75 | 310 | 10 | 15.34 | 33.63 | 6.75 | 24.86 | 310 | 0.03 |
| 20 | 14.14 | 33.58 | 6.99 | 289 | 20 | 14.14 | 33.58 | 6.99 | 25.08 | 289 | 0.06 |
| 30 | 12.86 | 33.60 | 5.80 | 263 | 30 | 12.86 | 33.60 | 5.80 | 25.36 | 263 | 0.09 |
| 50 | 11.04 | 33.73 | 3.83 | 221 | 50 | 11.04 | 33.73 | 3.83 | 25.80 | 221 | 0.14 |
| 75 | 9.82 | 33.82 | - | 194 | 75 | 9.82 | 33.82 | | 26.08 | 194 | 0.19 |
| BLACK DOUGLAS; April 13, 1952; 0838 GCT; 28°28'N, 115°35.5'W; sounding, 530 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 00°. | | | | | | | | | | | 117.40 |
| 0 | - | 33.39 | 6.62 | | 0 | 15.2 | 33.39 | 6.62 | 24.71 | 324 | 0.00 |
| 10 | 15.18 | 33.35 | 6.69 | 327 | 10 | 15.18 | 33.35 | 6.69 | 24.68 | 327 | 0.03 |
| 25 | - | 33.33 | 6.83 | | 20 | 15.2 | 33.34 | 6.78 | 24.67 | 328 | 0.07 |
| 50 | 14.01 | 33.31 | 6.94 | 306 | 30 | 15.0 | 33.32 | 6.88 | 24.70 | 325 | 0.10 |
| 74 | - | 33.39 | 6.57 | | 50 | 14.01 | 33.31 | 6.94 | 24.90 | 306 | 0.16 |
| 98 | 11.02 | 33.44 | 6.38 | 242 | 75 | 13.2 | 33.39 | 6.56 | 25.13 | 285 | 0.24 |
| 150 | 10.54 | 34.02 | 2.76 | 191 | 100 | 10.98 | 33.45 | 6.33 | 25.59 | 240 | 0.30 |
| 196 | 9.98 | 34.36 | 1.49 | 156 | 150 | 10.54 | 34.02 | 2.76 | 26.11 | 191 | 0.41 |
| 243 | 9.58 | 34.42 | 0.89 | 146 | 200 | 9.94 | 34.37 | 1.43 | 26.49 | 155 | 0.50 |
| 290 | 8.82 | 34.45 | 0.72 | 132 | 250 | 9.50 | 34.43 | 0.87 | 26.61 | 144 | 0.58 |
| 388 | 7.44 | 34.35 | 0.64 | 119 | 300 | 8.63 | 34.45 | 0.69 | 26.77 | 129 | 0.65 |
| 484 | 6.58 | 34.36 | 0.46 | 107 | 400 | 7.33 | 34.35 | 0.61 | 26.88 | 118 | 0.78 |
| 587 | 5.84 | 34.45 | 0.33 | 92 | 500 | 6.44 | 34.37 | 0.45 | 27.02 | 105 | 0.89 |
| | | | | | 600 | (5.76) | (34.45) | | (27.17) | (91) | (1.00) |
| BLACK DOUGLAS; April 13, 1952; 1439 GCT; 28°09'N, 116°16.5'W; sounding, 2300 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 14°. | | | | | | | | | | | 117.50 |
| 0 | - | 33.51 | 6.43 | | 0 | 16.0 | 33.51 | 6.43 | 24.62 | 333 | 0.00 |
| 10 | 16.08 | 33.51 | 6.48 | 334 | 10 | 16.08 | 33.51 | 6.48 | 24.60 | 334 | 0.03 |
| 24 | - | 33.51 | 6.53 | | 20 | 16.0 | 33.51 | 6.53 | 24.62 | 333 | 0.07 |
| 48 | 15.32 | 33.53 | 6.56 | 317 | 30 | 15.7 | 33.51 | 6.56 | 24.69 | 326 | 0.10 |
| 72 | - | 33.54 | 6.80 | | 50 | 15.3 | 33.53 | 6.56 | 24.79 | 316 | 0.16 |
| 95 | 13.76 | 33.49 | 5.87 | 288 | 75 | 15.0 | 33.53 | 6.80 | 24.86 | 310 | 0.24 |
| 144 | 11.14 | 33.89 | 3.39 | 210 | 100 | 12.95 | 33.55 | 5.57 | 25.30 | 268 | 0.32 |
| 188 | 9.90 | 34.04 | 2.89 | 179 | 150 | 10.91 | 33.92 | 3.33 | 25.97 | 204 | 0.44 |
| 232 | 10.10 | 34.36 | 1.25 | 158 | 200 | 9.91 | 34.09 | 2.58 | 26.28 | 175 | 0.53 |
| 276 | 9.78 | 34.43 | 0.84 | 148 | 250 | 10.05 | 34.41 | 0.97 | 26.50 | 154 | 0.62 |
| 370 | 8.16 | 34.40 | 0.58 | 126 | 300 | 9.29 | 34.43 | 0.78 | 26.65 | 140 | 0.69 |
| 463 | 7.16 | 34.40 | 0.37 | 112 | 400 | 7.83 | 34.40 | 0.50 | 26.85 | 121 | 0.83 |
| 565 | 6.14 | 34.36 | 0.34 | 102 | 500 | 6.79 | 34.39 | 0.34 | 26.99 | 108 | 0.95 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **117.60** | BLACK DOUGLAS; April 13, 1952; 2025 GCT; 27°47'N, 116°56'W; sounding, 1900 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 18°. | | | | | | | | | | |
| 0 | - | 33.53 | 6.54 | | 0 | 16.3 | 33.53 | 6.54 | 24.57 | 338 | 0.00 |
| 9 | 16.30 | 33.53 | 6.50 | 338 | 10 | 16.3 | 33.53 | 6.51 | 24.57 | 338 | 0.03 |
| 23 | - | 33.53 | 6.52 | | 20 | 16.2 | 33.53 | 6.51 | 24.59 | 335 | 0.07 |
| 52 | 14.90 | 33.42 | 6.79 | 316 | 30 | 16.2 | 33.53 | 6.57 | 24.59 | 335 | 0.10 |
| 75 | - | 33.39 | 6.63 | | 50 | 15.1 | 33.44 | 6.79 | 24.77 | 319 | 0.17 |
| 102 | 13.06 | 33.44 | 5.87 | 278 | 75 | 14.1 | 33.39 | 6.63 | 24.94 | 302 | 0.24 |
| 151 | 10.24 | 33.71 | 4.21 | 209 | 100 | 13.2 | 33.43 | 5.95 | 25.16 | 282 | 0.32 |
| 195 | 10.44 | 34.29 | 1.72 | 169 | 150 | 10.24 | 33.71 | 4.27 | 25.93 | 209 | 0.44 |
| 246 | 9.67 | 34.38 | 1.21 | 150 | 200 | 10.42 | 34.30 | 1.67 | 26.35 | 168 | 0.54 |
| 288 | 9.26 | 34.43 | 0.76 | 140 | 250 | 9.60 | 34.39 | 1.14 | 26.56 | 148 | 0.62 |
| 389 | 7.94 | 34.42 | 0.47 | 121 | 300 | 9.10 | 34.43 | 0.71 | 26.68 | 137 | 0.69 |
| 489 | 6.90 | 34.40 | 0.35 | 108 | 400 | 7.80 | 34.42 | 0.45 | 26.87 | 119 | 0.83 |
| 596 | 5.99 | 34.38 | 0.30 | 99 | 500 | 6.78 | 34.40 | 0.35 | 27.00 | 107 | 0.95 |
| | | | | | 600 | (5.95) | (34.38) | (0.30) | (27.09) | (98) | (1.06) |
| **117.70** | BLACK DOUGLAS; April 14, 1952; 0119 GCT; 27°27.5'N, 117°32.5'W; sounding, 2140 fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 18°. | | | | | | | | | | |
| 0 | - | 33.58 | 6.50 | | 0 | 16.4 | 33.58 | 6.50 | 24.59 | 336 | 0.00 |
| 9 | 16.40 | 33.59 | 6.51 | 335 | 10 | 16.4 | 33.59 | 6.51 | 24.59 | 335 | 0.03 |
| 23 | - | 33.64 | 6.45 | | 20 | 16.4 | 33.64 | 6.47 | 24.63 | 332 | 0.07 |
| 47 | 15.16 | 33.48 | 6.61 | 317 | 30 | 16.4 | 33.63 | 6.48 | 24.62 | 333 | 0.10 |
| 70 | - | 33.41 | 6.67 | | 50 | 15.0 | 33.46 | 6.62 | 24.81 | 315 | 0.17 |
| 93 | 12.30 | 33.48 | 5.19 | 261 | 75 | 14.4 | 33.41 | 6.66 | 24.90 | 307 | 0.24 |
| 141 | 10.44 | 33.89 | 3.28 | 199 | 100 | 11.92 | 33.54 | 4.86 | 25.49 | 250 | 0.31 |
| 183 | 9.59 | 34.11 | 2.52 | 169 | 150 | 10.25 | 33.95 | 3.01 | 26.11 | 191 | 0.43 |
| 226 | 8.87 | 34.21 | 2.22 | 150 | 200 | 9.28 | 34.16 | 2.42 | 26.44 | 160 | 0.51 |
| 269 | 8.83 | 34.34 | 1.23 | 140 | 250 | 8.83 | 34.29 | 1.50 | 26.61 | 144 | 0.59 |
| 361 | 7.93 | 34.38 | 0.79 | 124 | 300 | 8.62 | 34.37 | 1.07 | 26.71 | 135 | 0.67 |
| 452 | 6.99 | 34.37 | 0.51 | 112 | 400 | 7.47 | 34.38 | 0.67 | 26.89 | 118 | 0.80 |
| 552 | 6.24 | 34.41 | 0.33 | 99 | 500 | 6.62 | 34.38 | 0.43 | 27.00 | 106 | 0.92 |
| **120.25** | BLACK DOUGLAS; April 12, 1952; 1845 GCT; 28°23'N, 114°14.5'W; sounding, 24 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 15.94 | 33.62 | 6.75 | 323 | 0 | 15.94 | 33.62 | 6.75 | 24.72 | 323 | 0.00 |
| 10 | 15.72 | 33.62 | 6.72 | 319 | 10 | 15.72 | 33.62 | 6.72 | 24.77 | 319 | 0.03 |
| 20 | 15.32 | 33.62 | 6.85 | 310 | 20 | 15.32 | 33.62 | 6.85 | 24.86 | 310 | 0.06 |
| 30 | 14.14 | 33.62 | 6.55 | 286 | 30 | 14.14 | 33.62 | 6.55 | 25.11 | 286 | 0.09 |
| **120.30** | BLACK DOUGLAS; April 12, 1952; 1539 GCT; 28°13'N, 114°34'W; sounding, 53 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 15.18 | 33.51 | 6.86 | 315 | 0 | 15.18 | 33.51 | 6.86 | 24.81 | 315 | 0.00 |
| 10 | 15.17 | 33.48 | 6.90 | 317 | 10 | 15.17 | 33.48 | 6.90 | 24.78 | 317 | 0.03 |
| 20 | 14.64 | 33.44 | 6.99 | 309 | 20 | 14.64 | 33.44 | 6.99 | 24.87 | 309 | 0.06 |
| 30 | 13.95 | 33.53 | 6.62 | 289 | 30 | 13.95 | 33.53 | 6.62 | 25.08 | 289 | 0.09 |
| 50 | 12.22 | 33.62 | 4.37 | 249 | 50 | 12.22 | 33.62 | 4.37 | 25.50 | 249 | 0.15 |
| **120.35** | BLACK DOUGLAS; April 12, 1952; 1253 GCT; 28°03'N, 114°54'W; sounding, 45 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 15.48 | 33.53 | 6.66 | 320 | 0 | 15.48 | 33.53 | 6.66 | 24.75 | 320 | 0.00 |
| 10 | 15.48 | 33.53 | 6.71 | 320 | 10 | 15.48 | 33.53 | 6.71 | 24.75 | 320 | 0.03 |
| 20 | 15.49 | 33.53 | 6.73 | 320 | 20 | 15.49 | 33.53 | 6.73 | 24.75 | 320 | 0.06 |
| 30 | 15.38 | 33.53 | 6.74 | 318 | 30 | 15.38 | 33.53 | 6.74 | 24.78 | 318 | 0.10 |
| 50 | 14.66 | 33.60 | 6.57 | 298 | 50 | 14.66 | 33.60 | 6.57 | 24.99 | 298 | 0.16 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BLACK DOUGLAS; April 12, 1952; 0651 GCT; 27°43'N, 115°33'W; sounding, 1150 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 04°. 120.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.61 | 6.53 | | 0 | 16.2 | 33.61 | 6.53 | 24.65 | 330 | 0.00 |
| 10 | 16.28 | 33.62 | 6.55 | 331 | 10 | 16.28 | 33.62 | 6.55 | 24.64 | 331 | 0.03 |
| 25 | - | 33.60 | 6.62 | | 20 | 16.2 | 33.61 | 6.59 | 24.65 | 330 | 0.07 |
| 50 | - | 33.42 | 6.95 | | 30 | 14.8 | 33.58 | 6.67 | 24.94 | 302 | 0.10 |
| 74 | - | 33.55 | 4.82 | | 50 | 13.5 | 33.42 | 6.95 | 25.09 | 288 | 0.16 |
| 98 | 10.84 | 33.69 | 4.20 | 220 | 75 | 11.7 | 33.56 | 4.81 | 25.55 | 245 | 0.22 |
| 150 | 9.94 | 34.13 | 2.71 | 173 | 100 | 10.77 | 33.70 | 4.16 | 25.83 | 218 | 0.28 |
| 196 | 10.24 | 34.42 | 1.14 | 156 | 150 | 9.94 | 34.13 | 2.71 | 26.30 | 173 | 0.38 |
| 289 | 8.73 | 34.38 | 0.92 | 136 | 200 | 10.16 | 34.42 | 1.11 | 26.49 | 155 | 0.47 |
| 386 | 7.36 | 34.34 | 0.61 | 119 | 250 | 9.28 | 34.40 | 1.02 | 26.62 | 142 | 0.54 |
| 479 | 6.66 | 34.42 | 0.34 | 104 | 300 | 8.57 | 34.37 | 0.89 | 26.71 | 134 | 0.61 |
| 578 | 5.93 | 34.42 | 0.31 | 95 | 400 | 7.24 | 34.34 | 0.57 | 26.89 | 117 | 0.75 |
| 770 | 4.90 | 34.43 | 0.46 | 82 | 500 | 6.49 | 34.42 | 0.33 | 27.05 | 102 | 0.86 |
| 961 | 4.24 | 34.49 | 0.60 | 71 | 600 | 5.81 | 34.42 | 0.31 | 27.14 | 93 | 0.97 |
| 1162 | 3.64 | 34.54 | 0.90 | 61 | 700 | 5.24 | 34.42 | 0.39 | 27.21 | 87 | 1.06 |
| | | | | | 800 | 4.78 | 34.44 | 0.47 | 27.28 | 80 | 1.16 |
| | | | | | 1000 | 4.13 | 34.50 | 0.63 | 27.40 | 69 | 1.32 |

BLACK DOUGLAS; April 12, 1952; 0307 GCT; 27°31.5'N, 115°53.5'W; sounding, 2100 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 06°. 120.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.68 | 6.72 | | 0 | 16.2 | 33.68 | 6.72 | 24.71 | 325 | 0.00 |
| 10 | 16.14 | 33.68 | 6.80 | 323 | 10 | 16.14 | 33.68 | 6.80 | 24.72 | 323 | 0.03 |
| 25 | - | 33.73 | 6.34 | | 20 | 16.1 | 33.70 | 6.57 | 24.75 | 321 | 0.06 |
| 49 | 12.06 | 33.79 | 4.23 | 234 | 30 | 14.4 | 33.74 | 6.12 | 25.15 | 282 | 0.09 |
| 73 | - | 34.02 | 2.86 | | 50 | 12.0 | 33.80 | 4.14 | 25.68 | 232 | 0.15 |
| 98 | 10.34 | 34.13 | 2.40 | 179 | 75 | 10.7 | 34.03 | 2.84 | 26.09 | 193 | 0.20 |
| 148 | 10.13 | 34.40 | 1.05 | 156 | 100 | 10.32 | 34.14 | 2.33 | 26.25 | 178 | 0.25 |
| 194 | 9.31 | 34.45 | 0.93 | 139 | 150 | 10.12 | 34.41 | 1.02 | 26.49 | 155 | 0.33 |
| 239 | 8.60 | 34.36 | 1.14 | 135 | 200 | 9.20 | 34.44 | 0.96 | 26.67 | 138 | 0.41 |
| 284 | 8.31 | 34.36 | 0.80 | 131 | 250 | 8.51 | 34.36 | 1.13 | 26.71 | 134 | 0.48 |
| 382 | 7.53 | 34.39 | 0.43 | 118 | 300 | 8.23 | 34.36 | 0.72 | 26.76 | 130 | 0.55 |
| 477 | 6.62 | 34.43 | 0.31 | 103 | 400 | 7.36 | 34.40 | 0.40 | 26.92 | 115 | 0.67 |
| 579 | 5.88 | 34.40 | 0.39 | 96 | 500 | 6.43 | 34.43 | 0.32 | 27.07 | 100 | 0.79 |

BLACK DOUGLAS; April 11, 1952; 2049 GCT; 27°13'N, 116°31.5'W; sounding, 2060 fm; wind, 300°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°. 120.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.49 | 6.50 | | 0 | 16.4 | 33.49 | 6.50 | 24.52 | 343 | 0.00 |
| 10 | 16.25 | 33.49 | 6.53 | 339 | 10 | 16.25 | 33.49 | 6.53 | 24.55 | 339 | 0.03 |
| 24 | - | 33.49 | 6.54 | | 20 | 16.2 | 33.49 | 6.54 | 24.56 | 338 | 0.07 |
| 49 | - | 33.49 | 6.50 | | 30 | 15.8 | 33.49 | 6.52 | 24.65 | 330 | 0.10 |
| 73 | - | 33.46 | 6.62 | | 50 | 15.1 | 33.49 | 6.50 | 24.81 | 315 | 0.17 |
| 97 | 12.88 | 33.35 | 6.14 | 281 | 75 | 14.6 | 33.46 | 6.62 | 24.89 | 307 | 0.24 |
| 148 | 10.14 | 33.80 | 3.99 | 200 | 100 | 12.7 | 33.35 | 6.01 | 25.20 | 278 | 0.32 |
| 192 | 9.74 | 34.09 | 2.66 | 173 | 150 | 10.10 | 33.83 | 3.93 | 26.04 | 198 | 0.44 |
| 283 | 9.48 | 34.43 | 0.81 | 143 | 200 | 9.70 | 34.13 | 2.47 | 26.34 | 169 | 0.53 |
| 378 | 8.22 | 34.43 | 0.58 | 124 | 250 | 9.57 | 34.36 | 1.30 | 26.54 | 150 | 0.61 |
| 469 | 7.31 | 34.43 | 0.38 | 112 | 300 | 9.39 | 34.43 | 0.73 | 26.63 | 142 | 0.69 |
| 565 | 6.34 | 34.43 | 0.32 | 99 | 400 | 7.93 | 34.43 | 0.51 | 26.86 | 120 | 0.83 |
| 752 | 5.12 | 34.47 | 0.47 | 82 | 500 | 7.06 | 34.43 | 0.34 | 26.98 | 108 | 0.95 |
| 939 | 4.30 | 34.51 | 0.60 | 70 | 600 | 6.01 | 34.43 | 0.32 | 27.12 | 95 | 1.06 |
| 1138 | 3.62 | 34.58 | 0.82 | 58 | 700 | 5.37 | 34.45 | 0.39 | 27.22 | 86 | 1.16 |
| | | | | | 800 | 4.94 | 34.48 | 0.50 | 27.29 | 79 | 1.25 |
| | | | | | 1000 | 4.03 | 34.53 | 0.64 | 27.43 | 66 | 1.41 |

SIO

CCOFI 5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 120.70 | BLACK DOUGLAS; April 11, 1952; 1442 GCT; 26°52.5'N, 117°10'W; sounding, 2020 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 22°. | | | | | | | | | | |
| 0 | - | 33.62 | 6.50 | | 0 | 16.2 | 33.62 | 6.50 | 24.66 | 329 | 0.00 |
| 9 | 16.21 | 33.55 | 6.50 | 334 | 10 | 16.2 | 33.54 | 6.50 | 24.60 | 335 | 0.03 |
| 23 | - | 33.48 | 6.57 | | 20 | 16.2 | 33.49 | 6.56 | 24.56 | 338 | 0.07 |
| 51 | 15.20 | 33.51 | 6.54 | 316 | 30 | 16.1 | 33.48 | 6.56 | 24.58 | 337 | 0.10 |
| 73 | - | 33.51 | 6.63 | | 50 | 15.2 | 33.51 | 6.55 | 24.80 | 316 | 0.17 |
| 100 | 13.00 | 33.41 | 5.66 | 279 | 75 | 14.8 | 33.51 | 6.61 | 24.89 | 307 | 0.24 |
| 146 | 11.16 | 33.78 | 3.78 | 219 | 100 | 13.00 | 33.41 | 5.66 | 25.18 | 279 | 0.32 |
| 191 | 10.52 | 34.18 | 2.18 | 179 | 150 | 11.04 | 33.83 | 3.57 | 25.88 | 213 | 0.44 |
| 242 | 10.32 | 34.42 | 1.27 | 158 | 200 | 10.47 | 34.23 | 2.01 | 26.29 | 174 | 0.54 |
| 285 | 9.94 | 34.51 | 0.74 | 145 | 250 | 10.28 | 34.45 | 1.15 | 26.49 | 155 | 0.63 |
| 387 | 8.68 | 34.51 | 0.39 | 125 | 300 | 9.71 | 34.51 | 0.67 | 26.64 | 141 | 0.70 |
| 486 | 7.72 | 34.51 | 0.25 | 111 | 400 | 8.53 | 34.51 | 0.37 | 26.83 | 123 | 0.84 |
| 592 | 6.84 | 34.51 | 0.18 | 99 | 500 | 7.59 | 34.51 | 0.23 | 26.97 | 110 | 0.97 |
| | | | | | 600 | (6.80) | (34.51) | (0.18) | (27.08) | (99) | (1.08) |
| 120.80 | BLACK DOUGLAS; April 11, 1952; 0829 GCT; 26°32.5'N, 117°48.5'W; sounding, 2150 fm; wind, 300°, force 4; weather, intermittent light rain; sea, very rough; wire angle, 19°. | | | | | | | | | | |
| 0 | - | 33.58 | 6.52 | | 0 | 16.5 | 33.58 | 6.52 | 24.56 | 338 | 0.00 |
| 9 | 16.48 | 33.57 | 6.48 | 339 | 10 | 16.5 | 33.57 | 6.48 | 24.55 | 339 | 0.03 |
| 23 | - | 33.57 | 6.59 | | 20 | 16.5 | 33.57 | 6.57 | 24.55 | 339 | 0.07 |
| 75 | - | 33.58 | 6.58 | | 30 | 16.5 | 33.57 | 6.60 | 24.55 | 339 | 0.10 |
| 103 | 15.16 | 33.89 | 6.57 | 287 | 50 | 16.2 | 33.57 | 6.60 | 24.62 | 333 | 0.17 |
| 152 | 10.76 | 33.68 | 4.54 | 220 | 75 | 15.8 | 33.58 | 6.58 | 24.72 | 323 | 0.25 |
| 199 | 9.79 | 34.07 | 3.01 | 175 | 100 | 15.2 | 33.89 | 6.57 | 25.09 | 288 | 0.33 |
| 296 | 8.05 | 34.18 | 2.14 | 140 | 150 | 10.86 | 33.68 | 4.71 | 25.79 | 221 | 0.46 |
| 396 | 7.04 | 34.26 | 1.28 | 121 | 200 | 9.73 | 34.07 | 3.00 | 26.29 | 174 | 0.56 |
| 492 | 6.37 | 34.33 | 0.54 | 107 | 250 | 8.65 | 34.16 | 2.39 | 26.54 | 151 | 0.64 |
| 588 | 5.94 | 34.43 | 0.37 | 94 | 300 | 8.01 | 34.18 | 2.13 | 26.65 | 140 | 0.72 |
| 779 | 4.83 | 34.47 | 0.42 | 79 | 400 | 7.00 | 34.26 | 1.22 | 26.86 | 120 | 0.85 |
| 977 | 4.16 | 34.56 | 0.61 | 65 | 500 | 6.33 | 34.34 | 0.51 | 27.01 | 106 | 0.97 |
| 1172 | 3.64 | 34.54 | - | 61 | 600 | 5.90 | 34.43 | 0.37 | 27.14 | 94 | 1.08 |
| | | | | | 700 | 5.30 | 34.45 | 0.38 | 27.23 | 85 | 1.18 |
| | | | | | 800 | 4.76 | 34.48 | 0.45 | 27.31 | 77 | 1.27 |
| | | | | | 1000 | 4.08 | 34.56 | 0.62 | 27.45 | 64 | 1.42 |
| 120.90 | BLACK DOUGLAS; April 11, 1952; 0228 GCT; 26°12'N, 118°25'W; sounding, 2240 fm; wind, 260°, force 7; weather, partly cloudy; sea, very rough; wire angle, 20°. | | | | | | | | | | |
| 0 | - | 33.77 | - | | 0 | 17.2 | 33.77 | | 24.54 | 340 | 0.00 |
| 9 | 17.18 | 33.77 | 6.36 | 340 | 10 | 17.2 | 33.77 | 6.36 | 24.54 | 340 | 0.03 |
| 23 | - | 33.84 | 6.35 | | 20 | 17.2 | 33.82 | 6.35 | 24.58 | 336 | 0.07 |
| 52 | 16.52 | 33.84 | 6.41 | 320 | 30 | 17.2 | 33.84 | 6.37 | 24.60 | 335 | 0.10 |
| 74 | - | 33.86 | 6.35 | | 50 | 16.7 | 33.84 | 6.40 | 24.71 | 324 | 0.17 |
| 101 | 13.23 | 33.60 | 5.61 | 270 | 75 | 16.2 | 33.86 | 6.33 | 24.85 | 311 | 0.25 |
| | | | | | 100 | 13.3 | 33.60 | 5.67 | 25.27 | 271 | 0.32 |
| 123.37 | BLACK DOUGLAS; April 9, 1952; 2010 GCT; 27°24'N, 114°41'W; sounding, 39 fm; wind, 280°, force 3; weather, cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 14.24 | 33.75 | 7.51 | 278 | 0 | 14.24 | 33.75 | 7.51 | 25.19 | 278 | 0.00 |
| 10 | 13.40 | 33.77 | 6.53 | 260 | 10 | 13.40 | 33.77 | 6.53 | 25.38 | 260 | 0.03 |
| 20 | 11.74 | 33.71 | 4.51 | 234 | 20 | 11.74 | 33.71 | 4.51 | 25.66 | 234 | 0.05 |
| 30 | 11.46 | 33.82 | 3.71 | 221 | 30 | 11.46 | 33.82 | 3.71 | 25.79 | 221 | 0.07 |
| 50 | 11.43 | 34.00 | 2.66 | 207 | 50 | 11.43 | 34.00 | 2.66 | 25.94 | 207 | 0.12 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BLACK DOUGLAS; April 9, 1952; 2227 GCT; 27°18'N, 114°51.5'W; sounding, 280 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 25°.a) 123.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.55 | 6.88 | | 0 | 14.8 | 33.55 | 6.88 | 24.92 | 304 | 0.00 |
| 9 | 14.68 | 33.55 | 6.86 | 302 | 10 | 14.7 | 33.55 | 6.86 | 24.94 | 302 | 0.03 |
| 23 | - | 33.49 | 5.81 | | 20 | 13.3 | 33.50 | 6.30 | 25.19 | 278 | 0.06 |
| 45 | 12.44 | 33.73 | 4.71 | 245 | 30 | 12.2 | 33.50 | 5.34 | 25.41 | 258 | 0.09 |
| 67 | - | 33.78 | 3.71 | | 50 | 11.3 | 33.75 | 4.27 | 25.77 | 224 | 0.13 |
| 87 | 11.17 | 34.07 | 2.79 | 198 | 75 | 11.2 | 33.87 | 3.45 | 25.88 | 213 | 0.19 |
| 126 | 10.86 | 34.38 | 1.39 | 170 | 100 | 11.15 | 34.23 | 2.32 | 26.17 | 186 | 0.24 |
| 160 | 10.59 | 34.43 | 1.00 | 161 | 150 | 10.68 | 34.43 | 1.03 | 26.41 | 163 | 0.33 |
| 197 | 9.80 | 34.43 | 0.99 | 148 | 200 | 9.78 | 34.43 | 0.99 | 26.56 | 148 | 0.41 |
| 236 | 9.62 | 34.51 | - | 140 | 250 | 9.52 | 34.51 | 0.72 | 26.67 | 138 | 0.48 |
| 282 | 9.16 | 34.51 | 0.45 | 132 | 300 | 8.97 | 34.51 | 0.43 | 26.76 | 129 | 0.55 |
| 325 | 8.62 | 34.51 | 0.44 | 124 | | | | | | | |
| 371 | 8.00 | 34.47 | 0.37 | 118 | | | | | | | |

BLACK DOUGLAS; April 10, 1952; 0417 GCT; 26°58'N, 115°30.5'W; sounding, 2000 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 13°. 123.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.55 | 6.61 | | 0 | 15.8 | 33.55 | 6.61 | 24.70 | 325 | 0.00 |
| 10 | 15.92 | 33.57b) | 6.59 | 326 | 10 | 15.92 | 33.57 | 6.59 | 24.69 | 326 | 0.03 |
| 24 | - | 33.51 | 6.62 | | 20 | 15.9 | 33.57 | 6.60 | 24.69 | 326 | 0.07 |
| 48 | 14.82 | 33.40 | 6.69 | 316 | 30 | 15.7 | 33.50 | 6.64 | 24.68 | 327 | 0.10 |
| 72 | - | 33.30 | 6.54 | | 50 | 14.7 | 33.39 | 6.69 | 24.82 | 314 | 0.16 |
| 94 | 11.76 | 33.37 | 5.61 | 260 | 75 | 12.6 | 33.30 | 6.49 | 25.18 | 280 | 0.24 |
| 144 | 10.56 | 34.07 | 2.67 | 187 | 100 | 11.54 | 33.41 | 5.10 | 25.46 | 253 | 0.30 |
| 187 | 10.12 | 34.25 | 1.87 | 167 | 150 | 10.48 | 34.11 | 2.51 | 26.19 | 183 | 0.41 |
| 230 | 9.38 | 34.33 | 1.50 | 149 | 200 | 9.92 | 34.28 | 1.72 | 26.42 | 161 | 0.50 |
| 275 | 8.65 | 34.33 | 1.22 | 138 | 250 | 9.00 | 34.33 | 1.39 | 26.61 | 143 | 0.58 |
| 369 | 7.94 | 34.43 | 0.43 | 120 | 300 | 8.43 | 34.36 | 1.04 | 26.73 | 133 | 0.65 |
| 462 | 6.70 | 34.38 | 0.40 | 107 | 400 | 7.56 | 34.42 | 0.41 | 26.90 | 116 | 0.78 |
| 562 | 6.08 | 34.40 | 0.36 | 98 | 500 | 6.42 | 34.38 | 0.40 | 27.03 | 104 | 0.90 |

BLACK DOUGLAS; April 10, 1952; 0958 GCT; 26°38.5'N, 116°09'W; sounding, 2140 fm; wind, 260°, force 1; weather, cloudy; sea, moderate; wire angle, 04°. 123.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.64 | 6.43 | | 0 | 16.5 | 33.64 | 6.43 | 24.61 | 334 | 0.00 |
| 10 | 16.50 | 33.64 | 6.44 | 334 | 10 | 16.50 | 33.64 | 6.44 | 24.61 | 334 | 0.03 |
| 25 | - | 33.68 | 6.43 | | 20 | 16.5 | 33.67 | 6.43 | 24.63 | 332 | 0.07 |
| 50 | 15.48 | 33.61 | 6.56 | 314 | 30 | 16.2 | 33.68 | 6.44 | 24.71 | 325 | 0.10 |
| 74 | - | 33.53 | 6.54 | | 50 | 15.48 | 33.61 | 6.56 | 24.82 | 314 | 0.16 |
| 98 | 13.80 | 33.51 | 5.71 | 287 | 75 | 14.6 | 33.53 | 6.54 | 24.95 | 302 | 0.24 |
| 150 | 10.96 | 33.84 | 3.37 | 211 | 100 | 13.75 | 33.51 | 5.53 | 25.11 | 286 | 0.32 |
| 196 | 9.79 | 34.18 | 2.24 | 167 | 150 | 10.96 | 33.84 | 3.37 | 25.90 | 211 | 0.44 |
| 242 | 9.58 | 34.38 | 1.22 | 149 | 200 | 9.76 | 34.21 | 2.12 | 26.40 | 164 | 0.54 |
| 288 | 9.11 | 34.42 | 0.86 | 138 | 250 | 9.50 | 34.39 | 1.12 | 26.58 | 147 | 0.62 |
| 387 | 8.04 | 34.42 | 0.50 | 122 | 300 | 8.97 | 34.42 | 0.82 | 26.69 | 136 | 0.69 |
| 482 | 6.78 | 34.38 | 0.39 | 108 | 400 | 7.84 | 34.41 | 0.47 | 26.86 | 120 | 0.82 |
| 586 | 5.88 | 34.42 | 0.37 | 94 | 500 | 6.60 | 34.38 | 0.39 | 27.01 | 106 | 0.94 |
| | | | | | 600 | (5.80) | (34.42) | | (27.14) | (93) | (1.05) |

BLACK DOUGLAS; April 9, 1952; 1457 GCT; 26°55.5'N, 114°06'W; sounding, 43 fm; wind, 360°, force 3; weather, cloudy; sea, moderate; wire angle, 00°. 127.34

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.84 | 33.78 | 6.04 | 268 | 0 | 13.84 | 33.78 | 6.04 | 25.30 | 268 | 0.00 |
| 10 | 13.82 | 33.78 | 6.03 | 268 | 10 | 13.82 | 33.78 | 6.03 | 25.30 | 268 | 0.03 |
| 20 | 13.74 | 33.78 | 5.81 | 266 | 20 | 13.74 | 33.78 | 5.81 | 25.32 | 266 | 0.05 |
| 30 | 13.61 | 33.78 | 5.67 | 264 | 30 | 13.61 | 33.78 | 5.67 | 25.35 | 264 | 0.08 |
| 50 | 12.21 | 33.80 | 3.45 | 236 | 50 | 12.21 | 33.80 | 3.45 | 25.64 | 236 | 0.13 |

a) A series of thirty anchor stations were occupied off Baja California by RV Crest and RV Black Douglas during Cruise 5404, twenty-four at Station 123.41 and six at Station $123^{7}.41^{5}$. These data appear out of numerical sequence on pages 147 to 155 following the stations of the regular cruise pattern and a series of thirty drogue stations.

b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 127.40 | BLACK DOUGLAS; April 9, 1952; 1122 GCT; 26°43.5'N, 114°29.5'W; sounding, 1720 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | - | 33.58 | 6.87 | | 0 | 15.1 | 33.58 | 6.87 | 24.88 | 308 | 0.00 |
| 10 | 15.09 | 33.57 | 6.87 | 309 | 10 | 15.09 | 33.57 | 6.87 | 24.87 | 309 | 0.03 |
| 25 | - | 33.58 | 6.41 | | 20 | 14.8 | 33.57 | 6.60 | 24.93 | 303 | 0.06 |
| 55 | 11.38 | 33.68 | 4.40 | 230 | 30 | 13.6 | 33.59 | 6.17 | 25.20 | 278 | 0.09 |
| 79 | - | 33.96 | 3.43 | | 50 | 11.9 | 33.66 | 4.78 | 25.59 | 241 | 0.14 |
| 108 | 10.60 | 34.09 | 2.48 | 187 | 75 | 11.1 | 33.92 | 3.56 | 25.94 | 208 | 0.20 |
| 164 | 10.50 | 34.43 | 1.15 | 160 | 100 | 10.5 | 34.06 | 2.69 | 26.15 | 187 | 0.25 |
| 211 | 9.75 | 34.43 | 0.87 | 148 | 150 | 10.54 | 34.40 | 1.37 | 26.41 | 163 | 0.34 |
| 267 | 9.08 | 34.51a) | 0.76 | 131 | 200 | 9.95 | 34.43 | 0.91 | 26.54 | 151 | 0.42 |
| 313 | 8.57 | 34.43 | 0.45 | 129 | 250 | 9.28 | 34.50 | 0.78 | 26.70 | 135 | 0.49 |
| 421 | 7.28 | 34.36 | 0.42 | 116 | 300 | 8.72 | 34.45 | 0.52 | 26.75 | 130 | 0.56 |
| 526 | 6.30 | 34.43 | 0.30 | 99 | 400 | 7.53 | 34.36 | 0.42 | 26.86 | 120 | 0.69 |
| 634 | 5.61 | 34.45 | 0.29 | 89 | 500 | 6.52 | 34.41 | 0.33 | 27.04 | 103 | 0.81 |
| | | | | | 600 | 5.80 | 34.45 | 0.29 | 27.16 | 91 | 0.91 |
| 127.50 | BLACK DOUGLAS; April 9, 1952; 0459 GCT; 26°23.5'N, 115°08'W; sounding, 1900 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 22°. | | | | | | | | | | |
| 0 | - | 33.87 | 6.39 | | 0 | 16.8 | 33.87 | 6.39 | 24.71 | 324 | 0.00 |
| 9 | 16.77 | 33.89 | 6.43 | 322 | 10 | 16.8 | 33.89 | 6.43 | 24.73 | 322 | 0.03 |
| 23 | - | 33.89 | 6.41 | | 20 | 16.8 | 33.89 | 6.41 | 24.73 | 322 | 0.06 |
| 46 | 16.68 | 33.89 | 6.41 | 320 | 30 | 16.7 | 33.89 | 6.41 | 24.75 | 320 | 0.10 |
| 69 | - | 33.78 | 6.30 | | 50 | 16.5 | 33.88 | 6.40 | 24.79 | 316 | 0.16 |
| 90 | 13.32 | 33.64 | 5.59 | 268 | 75 | 15.9 | 33.74 | 6.11 | 24.82 | 314 | 0.24 |
| 131 | 10.79 | 33.89 | 3.82 | 204 | 100 | 12.53 | 33.65 | 5.13 | 25.46 | 253 | 0.31 |
| 169 | 9.73 | 34.14 | 2.62 | 169 | 150 | 10.18 | 34.03 | 3.18 | 26.18 | 184 | 0.42 |
| 206 | 9.36 | 34.29 | 1.88 | 152 | 200 | 9.39 | 34.27 | 1.98 | 26.50 | 154 | 0.51 |
| 246 | 9.27 | 34.33 | 1.33 | 147 | 250 | 9.27 | 34.33 | 1.28 | 26.57 | 147 | 0.59 |
| 332 | 8.58 | 34.51 | 0.52 | 124 | 300 | 8.92 | 34.47 | 0.73 | 26.74 | 132 | 0.66 |
| 420 | 7.74 | 34.45 | 0.34 | 116 | 400 | 7.94 | 34.46 | 0.37 | 26.88 | 118 | 0.79 |
| 517 | 6.68 | 34.42 | 0.27 | 104 | 500 | 6.89 | 34.43 | 0.29 | 27.01 | 106 | 0.91 |
| 127.60 | BLACK DOUGLAS; April 8, 1952; 2314 GCT; 26°04'N, 115°46'W; sounding, 2100 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 16°. | | | | | | | | | | |
| 0 | - | 33.89 | 6.88 | | 0 | 17.2 | 33.89 | 6.88 | 24.64 | 331 | 0.00 |
| 10 | 17.12 | 33.87 | 6.84 | 331 | 10 | 17.12 | 33.87 | 6.84 | 24.64 | 331 | 0.03 |
| 23 | - | 33.90 | 6.90 | | 20 | 17.0 | 33.89 | 6.88 | 24.68 | 327 | 0.07 |
| 48 | 16.80 | 33.84 | 6.90 | 326 | 30 | 16.9 | 33.89 | 6.90 | 24.71 | 325 | 0.10 |
| 71 | - | 33.83 | 6.92 | | 50 | 16.6 | 33.84 | 6.90 | 24.74 | 322 | 0.16 |
| 94 | 14.80 | 33.67 | 5.99 | 296 | 75 | 16.4 | 33.83 | 6.91 | 24.78 | 318 | 0.24 |
| 142 | 10.85 | 33.82 | 4.01 | 211 | 100 | 13.60 | 33.67 | 5.62 | 25.26 | 272 | 0.32 |
| 184 | 9.67 | 34.05 | 3.23 | 174 | 150 | 10.53 | 33.87 | 3.80 | 26.00 | 202 | 0.44 |
| 226 | 9.01 | 34.20 | 2.50 | 153 | 200 | 9.37 | 34.11 | 2.99 | 26.38 | 165 | 0.53 |
| 269 | 8.83 | 34.32 | 2.06 | 141 | 250 | 8.91 | 34.28 | 2.23 | 26.59 | 146 | 0.61 |
| 362 | 7.82 | 34.38 | 0.73 | 122 | 300 | 8.59 | 34.35 | 1.71 | 26.69 | 136 | 0.68 |
| 453 | 7.07 | 34.39 | 0.39 | 111 | 400 | 7.49 | 34.38 | 0.50 | 26.88 | 118 | 0.82 |
| 554 | 6.48 | 34.40 | 0.53 | 103 | 500 | 6.78 | 34.39 | 0.42 | 26.99 | 108 | 0.94 |
| 130.30 | BLACK DOUGLAS; April 7, 1952; 2134 GCT; 26°29'N, 113°29'W; sounding, 43 fm; wind, 280°, force 4; weather, partly cloudy; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 0 | 16.70 | 33.89 | 6.76 | 320 | 0 | 16.70 | 33.89 | 6.76 | 24.75 | 320 | 0.00 |
| 10 | 16.37 | 33.87 | 6.83 | 314 | 10 | 16.37 | 33.87 | 6.83 | 24.81 | 314 | 0.03 |
| 20 | 16.19 | 33.85 | 6.78 | 312 | 20 | 16.19 | 33.85 | 6.78 | 24.84 | 312 | 0.06 |
| 30 | 14.13 | 33.78 | 6.01 | 274 | 30 | 14.13 | 33.78 | 6.01 | 25.24 | 274 | 0.09 |
| 50 | 13.34 | 34.07 | 2.93 | 237 | 50 | 13.34 | 34.07 | 2.93 | 25.62 | 237 | 0.14 |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| BLACK DOUGLAS; April 8, 1952; 0037 GCT; 26°19'N, 113°48.5'W; sounding, 150 fm; wind, 290°, force 6; weather, cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | | 130.35 |
| 0 | 15.64 | 33.62 | 6.77 | 317 | 0 | 15.64 | 33.62 | 6.77 | 24.79 | 317 | 0.00 |
| 10 | 15.64 | 33.60 | 6.81 | 318 | 10 | 15.64 | 33.60 | 6.81 | 24.77 | 318 | 0.03 |
| 24 | 15.48 | 33.64 | 7.00 | 312 | 20 | 15.57 | 33.62 | 6.98 | 24.80 | 315 | 0.06 |
| 49 | 14.24 | 33.66 | 6.29 | 285 | 30 | 15.32 | 33.65 | 6.96 | 24.88 | 308 | 0.09 |
| 74 | 12.00 | 33.73 | 4.16 | 237 | 50 | 13.88 | 33.66 | 6.10 | 25.20 | 278 | 0.15 |
| 99 | 11.25 | 33.95 | 3.01 | 208 | 75 | 11.97 | 33.74 | 4.03 | 25.64 | 236 | 0.22 |
| 123 | 10.51 | 34.05 | 2.69 | 188 | 100 | 11.20 | 33.96 | 2.98 | 25.95 | 206 | 0.27 |
| 153 | 10.76 | 34.27 | 1.88 | 176 | 150 | 10.74 | 34.21 | 1.92 | 26.23 | 180 | 0.37 |
| BLACK DOUGLAS; April 8, 1952; 0421 GCT; 26°09'N, 114°07.5'W; sounding, 1160 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 23°. | | | | | | | | | | | 130.40 |
| 0 | - | 34.18 | 6.64 | | 0 | 17.1 | 34.18 | 6.64 | 24.88 | 308 | 0.00 |
| 9 | 17.10 | 34.14 | 6.41 | 311 | 10 | 17.1 | 34.14 | 6.41 | 24.85 | 311 | 0.03 |
| 23 | - | 34.18 | 6.40 | | 20 | 17.1 | 34.17 | 6.40 | 24.87 | 309 | 0.06 |
| 51 | - | 34.14 | 6.44 | | 30 | 17.1 | 34.18 | 6.42 | 24.88 | 308 | 0.09 |
| 74 | - | 33.93 | 3.37 | | 50 | 17.0 | 34.14 | 6.44 | 24.87 | 309 | 0.15 |
| 100 | 12.03 | 33.93 | 3.17 | 223 | 75 | 13.5 | 33.93 | 3.34 | 25.48 | 251 | 0.23 |
| 147 | 11.78 | 34.51 | 0.80 | 176 | 100 | 12.03 | 33.93 | 3.17 | 25.77 | 223 | 0.28 |
| 193 | 11.12 | 34.60 | 0.55 | 158 | 150 | 11.73 | 34.52 | 0.77 | 26.29 | 174 | 0.39 |
| 285 | 9.78 | 34.51 | 0.32 | 142 | 200 | 11.02 | 34.60 | 0.52 | 26.48 | 156 | 0.47 |
| 384 | 8.45 | 34.49 | 0.36 | 123 | 250 | 10.29 | 34.55 | 0.39 | 26.57 | 147 | 0.55 |
| 482 | 7.08 | 34.42 | 0.27 | 109 | 300 | 9.57 | 34.51 | 0.32 | 26.66 | 139 | 0.62 |
| 576 | 6.37 | 34.43 | 0.28 | 99 | 400 | 8.27 | 34.48 | 0.34 | 26.85 | 121 | 0.76 |
| 762 | 5.13 | 34.49 | - | 80 | 500 | 6.93 | 34.42 | 0.27 | 26.99 | 107 | 0.88 |
| 954 | 4.22 | 34.49 | - | 71 | 600 | 6.19 | 34.44 | | 27.11 | 96 | 0.99 |
| 1148 | 3.78 | 34.49 | 0.71 | 66 | 700 | 5.49 | 34.48 | | 27.23 | 85 | 1.09 |
| | | | | | 800 | 4.94 | 34.49 | | 27.30 | 78 | 1.18 |
| | | | | | 1000 | 4.07 | 34.49 | | 27.40 | 69 | 1.35 |
| BLACK DOUGLAS; April 8, 1952; 1103 GCT; 25°49'N, 114°46'W; sounding, 2020 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 13°. | | | | | | | | | | | 130.50 |
| 0 | - | 33.77 | 6.77 | | 0 | 16.3 | 33.77 | 6.77 | 24.75 | 320 | 0.00 |
| 10 | 16.33 | 33.84 | - | 316 | 10 | 16.33 | 33.84 | 6.62 | 24.80 | 316 | 0.03 |
| 24 | - | 33.80 | 6.66 | | 20 | 16.3 | 33.82 | 6.64 | 24.79 | 316 | 0.06 |
| 53 | 14.91 | 33.64 | 6.89 | 300 | 30 | 16.3 | 33.77 | 6.72 | 24.75 | 320 | 0.10 |
| 77 | - | 33.68 | 6.13 | | 50 | 14.9 | 33.64 | 6.89 | 24.97 | 300 | 0.16 |
| 105 | 12.27 | 33.69 | 3.93 | 245 | 75 | 14.3 | 33.68 | 6.26 | 25.12 | 285 | 0.23 |
| 155 | 10.17 | 33.96 | 3.23 | 189 | 100 | 12.5 | 33.69 | 4.02 | 25.50 | 249 | 0.30 |
| 203 | 9.54 | 34.13 | 2.33 | 166 | 150 | 10.31 | 33.90 | 3.27 | 26.06 | 196 | 0.41 |
| 257 | 9.50 | 34.45 | 0.99 | 142 | 200 | 9.58 | 34.12 | 2.40 | 26.36 | 168 | 0.50 |
| 302 | 9.37 | 34.49 | 0.52 | 137 | 250 | 9.50 | 34.43 | 1.10 | 26.61 | 144 | 0.58 |
| 408 | 8.19 | 34.52 | 0.27 | 117 | 300 | 9.37 | 34.49 | 0.54 | 26.68 | 137 | 0.66 |
| 510 | 6.88 | 34.43 | 0.24 | 106 | 400 | 8.29 | 34.52 | 0.27 | 26.87 | 119 | 0.79 |
| 618 | 6.04 | 34.45 | 0.22 | 94 | 500 | 6.99 | 34.44 | 0.24 | 27.00 | 107 | 0.91 |
| | | | | | 600 | 6.14 | 34.45 | 0.22 | 27.12 | 95 | 1.02 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 130.60 | BLACK DOUGLAS; April 8, 1952; 1653 GCT; 25°26'N, 115°25'W; sounding, 2200 fm; wind, 320°; force 2; weather, cloudy; sea, rough; wire angle, 14°. | | | | | | | | | | |
| 0 | - | 33.51 | 6.62 | | 0 | 15.8 | 33.51 | 6.62 | 24.67 | 328 | 0.00 |
| 10 | 15.65 | 33.53 | 6.70 | 324 | 10 | 15.65 | 33.53 | 6.70 | 24.72 | 324 | 0.03 |
| 24 | - | 33.60 | 6.62 | | 20 | 15.6 | 33.60 | 6.63 | 24.78 | 317 | 0.06 |
| 48 | - | 33.55 | 6.63 | | 30 | 15.6 | 33.60 | 6.63 | 24.78 | 317 | 0.10 |
| 72 | - | 33.66 | 5.98 | | 50 | 15.0 | 33.55 | 6.62 | 24.88 | 309 | 0.16 |
| 95 | 14.20 | 33.55 | 6.17 | 292 | 75 | 15.0 | 33.66 | 5.99 | 24.96 | 301 | 0.24 |
| 145 | 11.54 | 33.97 | 3.12 | 212 | 100 | 13.00 | 33.55 | 6.07 | 25.29 | 269 | 0.31 |
| 187 | 10.43 | 34.14 | 2.22 | 180 | 150 | 11.44 | 34.01 | 2.90 | 25.95 | 207 | 0.43 |
| 273 | 8.64 | 34.31 | 1.79 | 139 | 200 | 10.07 | 34.17 | 2.11 | 26.31 | 172 | 0.52 |
| 363 | 8.39 | 34.42 | 0.60 | 128 | 250 | 8.90 | 34.27 | 1.90 | 26.58 | 146 | 0.61 |
| 450 | 7.48 | 34.43 | 0.39 | 114 | 300 | 8.57 | 34.36 | 1.43 | 26.71 | 135 | 0.68 |
| 542 | 6.54 | 34.45 | 0.26 | 100 | 400 | 8.08 | 34.42 | 0.45 | 26.83 | 123 | 0.81 |
| 721 | 5.28 | 34.46 | 0.36 | 84 | 500 | 6.92 | 34.44 | 0.32 | 27.01 | 106 | 0.94 |
| 903 | 4.43 | 34.51 | 0.54 | 71 | 600 | 6.10 | 34.46 | 0.28 | 27.13 | 94 | 1.04 |
| 1100 | 3.82 | 34.60 | 0.77 | 58 | 700 | 5.39 | 34.46 | 0.33 | 27.22 | 86 | 1.14 |
| | | | | | 800 | 4.91 | 34.48 | 0.44 | 27.30 | 79 | 1.23 |
| | | | | | 1000 | 4.08 | 34.56 | 0.61 | 27.45 | 64 | 1.39 |
| 133.25 | BLACK DOUGLAS; April 7, 1952; 1607 GCT; 26°04.5'N, 112°48'W; sounding, 44 fm; wind, 300°, force 2; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 16.18 | 33.91 | - | 307 | 0 | 16.18 | 33.91 | | 24.89 | 307 | 0.00 |
| 10 | 15.88 | 33.87 | - | 304 | 10 | 15.88 | 33.87 | | 24.93 | 304 | 0.03 |
| 20 | 14.98 | 33.78 | 6.59 | 291 | 20 | 14.98 | 33.78 | 6.59 | 25.06 | 291 | 0.06 |
| 30 | 14.29 | 33.77 | 6.18 | 278 | 30 | 14.29 | 33.77 | 6.18 | 25.20 | 278 | 0.09 |
| 50 | 14.20 | 34.07 | 4.35 | 254 | 50 | 14.20 | 34.07 | 4.35 | 25.45 | 254 | 0.14 |
| 133.30 | BLACK DOUGLAS; April 7, 1952; 1255 GCT; 25°55.5'N, 113°06.5'W; sounding, 100 fm; wind, 290°, force 4; weather, overcast; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | - | 34.07 | 6.50 | | 0 | 17.0 | 34.07 | 6.50 | 24.82 | 314 | 0.00 |
| 10 | 17.04 | 34.07 | 6.49 | 315 | 10 | 17.04 | 34.07 | 6.49 | 24.81 | 315 | 0.03 |
| 25 | - | 33.82 | 7.15 | | 20 | 15.4 | 33.83 | 7.10 | 25.00 | 296 | 0.06 |
| 50 | - | 33.80 | 5.91 | | 30 | 15.2 | 33.82 | 7.10 | 25.04 | 293 | 0.09 |
| 75 | - | 34.04 | 3.00 | | 50 | 13.9 | 33.80 | 5.91 | 25.30 | 268 | 0.15 |
| 101 | 12.00 | 34.27 | 2.34 | 198 | 75 | 12.4 | 34.04 | 3.00 | 25.79 | 222 | 0.21 |
| 126 | 11.92 | 34.51 | 0.54u | 178 | 100 | 12.0 | 34.25 | 2.36 | 26.03 | 199 | 0.26 |
| 155 | 11.30 | 34.54 | 0.80 | 165 | 150 | 11.44 | 34.54 | | 26.36 | 168 | 0.36 |
| 133.40 | BLACK DOUGLAS; April 7, 1952; 0712 GCT; 25°34.5'N, 113°45.5'W; sounding, 1750 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 14°. | | | | | | | | | | |
| 0 | - | 34.13 | 6.32 | | 0 | 17.5 | 34.13 | 6.32 | 24.75 | 321 | 0.00 |
| 9 | 17.50 | 34.07 | 6.35 | 325 | 10 | 17.5 | 34.07 | 6.34 | 24.70 | 325 | 0.03 |
| 23 | - | 34.16 | 6.29 | | 20 | 17.4 | 34.13 | 6.30 | 24.77 | 318 | 0.06 |
| 48 | 17.11 | 34.29 | 6.30 | 300 | 30 | 17.2 | 34.25 | 6.29 | 24.91 | 305 | 0.10 |
| 72 | - | 34.14 | 5.79 | | 50 | 17.1 | 34.29 | 6.29 | 24.97 | 300 | 0.16 |
| 95 | 12.64 | 33.80 | 4.05 | 244 | 75 | 13.6 | 34.09 | 5.67 | 25.59 | 241 | 0.22 |
| 145 | 11.11 | 34.23 | 1.95 | 185 | 100 | 11.56 | 33.80 | 3.68 | 25.76 | 224 | 0.28 |
| 189 | 10.78 | 34.43 | 1.18 | 164 | 150 | 11.07 | 34.25 | 1.81 | 26.20 | 183 | 0.39 |
| 234 | 10.29 | 34.52 | 0.61 | 150 | 200 | 10.68 | 34.46 | 1.03 | 26.43 | 161 | 0.47 |
| 280 | 9.47 | 34.51 | 0.46 | 137 | 250 | 9.98 | 34.52 | 0.52 | 26.60 | 145 | 0.55 |
| 375 | 8.52 | 34.49 | 0.38 | 124 | 300 | 9.23 | 34.51 | 0.45 | 26.72 | 133 | 0.63 |
| 468 | 7.42 | 34.47 | 0.30 | 110 | 400 | 8.22 | 34.48 | 0.34 | 26.85 | 121 | 0.76 |
| 570 | 6.34 | 34.45 | 0.31 | 98 | 500 | 7.08 | 34.47 | 0.30 | 27.01 | 106 | 0.88 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| BLACK DOUGLAS; April 7, 1952; 0110 GCT; 25°14.5'N, 114°24'W; sounding, 2040 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 18°. | | | | | | | | | | | 133.50 |
| 0 | - | 34.25 | 6.18 | | 0 | 18.2 | 34.25 | 6.18 | 24.67 | 328 | 0.00 |
| 9 | 18.18 | 34.23 | 6.17 | 329 | 10 | 18.2 | 34.22 | 6.17 | 24.65 | 330 | 0.03 |
| 23 | - | 34.20 | 6.16 | | 20 | 18.1 | 34.21 | 6.17 | 24.66 | 329 | 0.07 |
| 47 | - | 34.18 | 6.19 | | 30 | 18.0 | 34.19 | 6.18 | 24.67 | 328 | 0.10 |
| 70 | - | 34.14 | 5.99 | | 50 | 17.7 | 34.18 | 6.17 | 24.74 | 322 | 0.16 |
| 93 | 13.88 | 33.75 | 5.07 | 271 | 75 | 16.0 | 34.07 | 5.88 | 25.05 | 292 | 0.24 |
| 139 | 10.76 | 33.96 | 3.10 | 199 | 100 | 13.2 | 33.75 | 4.42 | 25.41 | 258 | 0.31 |
| 180 | 11.05 | 34.40 | 1.26 | 171 | 150 | 10.85 | 34.18 | 2.37 | 26.18 | 184 | 0.42 |
| 221 | 10.16 | 34.48 | 0.92 | 150 | 200 | 10.88 | 34.46 | 1.03 | 26.40 | 164 | 0.51 |
| 264 | 9.77 | 34.49 | 0.93 | 143 | 250 | 9.89 | 34.49 | 0.92 | 26.59 | 145 | 0.59 |
| 355 | 8.56 | 34.51 | 0.35 | 123 | 300 | 9.32 | 34.50 | 0.83 | 26.70 | 136 | 0.66 |
| 444 | 7.68 | 34.43 | 0.34 | 117 | 400 | 8.11 | 34.47 | 0.34 | 26.86 | 120 | 0.80 |
| 544 | 6.67 | 34.47 | 0.24 | 100 | 500 | 7.14 | 34.45 | 0.28 | 26.99 | 108 | 0.92 |
| BLACK DOUGLAS; April 6, 1952; 1946 GCT; 24°54.5'N, 115°01.5'W; sounding, 2210 fm; wind, 280°, force 2; weather, partly cloudy; sea, slight; wire angle, 07°. | | | | | | | | | | | 133.60 |
| 0 | - | 34.27 | 6.20 | | 0 | 18.4 | 34.27 | 6.20 | 24.63 | 332 | 0.00 |
| 10 | 18.33 | 34.27 | 6.23 | 330 | 10 | 18.33 | 34.27 | 6.23 | 24.65 | 330 | 0.03 |
| 25 | - | 34.27 | 6.41 | | 20 | 18.2 | 34.27 | 6.37 | 24.68 | 327 | 0.07 |
| 50 | - | 34.09 | 6.59 | | 30 | 18.0 | 34.26 | 6.48 | 24.73 | 323 | 0.10 |
| 73 | - | 33.73 | 5.44 | | 50 | 16.7 | 34.09 | 6.59 | 24.91 | 306 | 0.16 |
| 97 | 12.64 | 33.80 | 4.32 | 244 | 75 | 13.4 | 33.73 | 5.17 | 25.35 | 263 | 0.23 |
| 148 | 10.89 | 34.13 | 2.50 | 188 | 100 | 12.48 | 33.84 | 4.17 | 25.62 | 238 | 0.30 |
| 194 | 11.11 | 34.49 | 1.05 | 166 | 150 | 10.89 | 34.16 | 2.33 | 26.16 | 186 | 0.40 |
| 239 | 10.17 | 34.49 | 0.90 | 150 | 200 | 11.07 | 34.49 | 1.01 | 26.39 | 165 | 0.49 |
| 285 | 9.61 | 34.50 | 0.49 | 140 | 250 | 10.00 | 34.49 | 0.83 | 26.57 | 147 | 0.57 |
| 384 | 8.32 | 34.49 | 0.34 | 121 | 300 | 9.43 | 34.50 | 0.43 | 26.68 | 137 | 0.65 |
| 479 | 7.27 | 34.43 | 0.27 | 111 | 400 | 8.13 | 34.48 | 0.33 | 26.87 | 119 | 0.78 |
| 582 | 6.36 | 34.44 | 0.21 | 99 | 500 | 7.06 | 34.43 | 0.23 | 26.98 | 108 | 0.90 |
| | | | | | 600 | (6.23) | (34.44) | | (27.10) | (97) | (1.02) |
| BLACK DOUGLAS; April 5, 1952; 1712 GCT; 25°34'N, 112°18.5'W; sounding, 41 fm; wind, 300°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 137.23 |
| 0 | 17.34 | 34.13 | 6.32 | 317 | 0 | 17.34 | 34.13 | 6.32 | 24.79 | 317 | 0.00 |
| 10 | 17.24 | 34.09 | - | 318 | 10 | 17.24 | 34.09 | | 24.78 | 318 | 0.03 |
| 20 | 16.50 | - | 5.92 | | 20 | 16.50 | 34.09 | 5.92 | 24.95 | 301 | 0.06 |
| 30 | 15.66 | 34.09 | 5.73 | 283 | 30 | 15.66 | 34.09 | 5.73 | 25.14 | 283 | 0.09 |
| 50 | 15.06 | 34.29 | 3.78 | 256 | 50 | 15.06 | 34.29 | 3.78 | 25.43 | 256 | 0.15 |
| BLACK DOUGLAS; April 5, 1952; 2112 GCT; 25°19.5'N, 112°46'W; sounding, 190 fm; wind, 280°, force 2; weather, partly cloudy; sea, moderate; wire angle, 16°. | | | | | | | | | | | 137.30 |
| 0 | - | 34.16 | 6.60 | | 0 | 18.0 | 34.16 | 6.60 | 24.65 | 330 | 0.00 |
| 9 | 17.60 | 34.14 | 6.51 | 322 | 10 | 17.6 | 34.13 | 6.48 | 24.72 | 323 | 0.03 |
| 23 | - | 33.93 | 5.94 | | 20 | 17.1 | 34.04 | 6.11 | 24.77 | 318 | 0.06 |
| 47 | - | 33.87 | 5.22 | | 30 | 14.7 | 33.89 | 5.72 | 25.20 | 278 | 0.09 |
| 71 | 13.54 | 34.14 | 3.10 | 236 | 50 | 13.9 | 33.87 | 5.00 | 25.35 | 263 | 0.15 |
| 94 | 13.05 | 34.31 | 1.48 | 214 | 75 | 13.42 | 34.21 | 2.78 | 25.72 | 229 | 0.21 |
| 144 | 11.80 | 34.58 | 0.47 | 171 | 100 | 12.92 | 34.34 | 1.22 | 25.92 | 209 | 0.27 |
| 190 | 11.14 | 34.63 | 0.32 | 156 | 150 | 11.68 | 34.60 | 0.44 | 26.36 | 168 | 0.36 |
| 236 | 10.90 | 34.61 | 0.18 | 153 | 200 | 11.09 | 34.62 | 0.29 | 26.48 | 156 | 0.44 |
| 283 | 10.67 | 34.65 | 0.19 | 146 | 250 | 10.83 | 34.62 | 0.18 | 26.53 | 151 | 0.52 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **137.40** | BLACK DOUGLAS; April 6, 1952; 0307 GCT; 24°59'N, 113°25.5'W; sounding, 1320 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 09°. | | | | | | | | | | |
| 0 | - | 34.20 | 6.33 | | 0 | 17.8 | 34.20 | 6.33 | 24.73 | 323 | 0.00 |
| 10 | 17.76 | 34.20 | 6.26 | 322 | 10 | 17.76 | 34.20 | 6.26 | 24.74 | 322 | 0.03 |
| 25 | - | 34.19 | 6.61 | | 20 | 17.4 | 34.20 | 6.58 | 24.82 | 313 | 0.06 |
| 54 | - | 34.09 | 6.41 | | 30 | 16.7 | 34.18 | 6.61 | 24.98 | 299 | 0.09 |
| 78 | - | 33.93 | 5.59 | | 50 | 16.4 | 34.11 | 6.48 | 24.99 | 297 | 0.15 |
| 106 | 13.00 | 34.11 | 2.61 | 228 | 75 | 14.6 | 33.93 | 5.75 | 25.25 | 273 | 0.23 |
| 156 | 11.70 | 34.40 | 1.33 | 183 | 100 | 13.26 | 34.02 | 2.87 | 25.60 | 239 | 0.29 |
| 205 | 11.03 | 34.58 | 0.63 | 158 | 150 | 11.82 | 34.37 | 1.42 | 26.15 | 187 | 0.40 |
| 260 | 10.47 | 34.61 | 0.33 | 146 | 200 | 11.11 | 34.57 | 0.68 | 26.44 | 160 | 0.49 |
| 305 | 9.28 | 34.51 | 0.33 | 134 | 250 | 10.58 | 34.61 | 0.37 | 26.57 | 148 | 0.57 |
| 410 | 8.14 | 34.49 | 0.33 | 119 | 300 | 9.37 | 34.52 | 0.33 | 26.70 | 135 | 0.64 |
| 513 | 6.90 | 34.43 | 0.25 | 106 | 400 | 8.24 | 34.49 | 0.33 | 26.86 | 120 | 0.77 |
| 619 | 5.94 | 34.47 | 0.26 | 91 | 500 | 7.03 | 34.43 | 0.27 | 26.99 | 108 | 0.90 |
| | | | | | 600 | 6.12 | 34.46 | 0.26 | 27.13 | 94 | 1.01 |
| **137.50** | BLACK DOUGLAS; April 6, 1952; 0832 GCT; 24°40'N, 114°01.5'W; sounding, 2100 fm; wind, 340°, force 2; weather, cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | - | 34.16 | 6.07 | | 0 | 17.8 | 34.16 | 6.07 | 24.70 | 325 | 0.00 |
| 9 | 17.85 | 34.14 | 6.05 | 328 | 10 | 17.8 | 34.14 | 6.06 | 24.68 | 327 | 0.03 |
| 24 | - | 34.20 | 6.20 | | 20 | 17.8 | 34.19 | 6.14 | 24.72 | 323 | 0.07 |
| 48 | - | 34.11 | 6.30 | | 30 | 17.7 | 34.19 | 6.28 | 24.74 | 321 | 0.10 |
| 72 | - | 33.93 | 5.87 | | 50 | 17.3 | 34.10 | 6.28 | 24.77 | 318 | 0.16 |
| 95 | 12.22 | 33.73 | 4.44 | 241 | 75 | 14.9 | 33.93 | 5.70 | 25.19 | 279 | 0.24 |
| 144 | 10.92 | 34.16 | 2.47 | 187 | 100 | 12.11 | 33.73 | 4.10 | 25.60 | 239 | 0.30 |
| 188 | 11.14 | 34.58 | 1.08 | 160 | 150 | 10.94 | 34.28 | 2.28 | 26.25 | 178 | 0.41 |
| 231 | 10.78 | 34.61 | 0.46 | 151 | 200 | 11.13 | 34.60 | 0.77 | 26.46 | 158 | 0.49 |
| 275 | 9.75 | 34.52 | 0.55 | 141 | 250 | 10.31 | 34.59 | 0.49 | 26.60 | 145 | 0.57 |
| 371 | 8.46 | 34.51 | 0.41 | 122 | 300 | 9.31 | 34.51 | 0.55 | 26.70 | 135 | 0.64 |
| 464 | 7.58 | 34.51 | 0.19 | 109 | 400 | 8.19 | 34.51 | 0.29 | 26.88 | 118 | 0.78 |
| 565 | 6.54 | 34.49 | 0.21 | 97 | 500 | 7.26 | 34.50 | 0.19 | 27.01 | 106 | 0.90 |
| **137.60** | BLACK DOUGLAS; April 6, 1952; 1350 GCT; 24°18'N, 114°38.5'W; sounding, 2040 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 08°. | | | | | | | | | | |
| 0 | - | 34.09 | 6.32 | | 0 | 17.9 | 34.09 | 6.32 | 24.62 | 333 | 0.00 |
| 10 | 18.04 | 34.12 | 6.16 | 334 | 10 | 18.04 | 34.12 | 6.16 | 24.61 | 334 | 0.03 |
| 25 | - | 34.14 | 6.16 | | 20 | 17.9 | 34.14 | 6.16 | 24.66 | 329 | 0.07 |
| 49 | - | 33.93 | 6.41 | | 30 | 17.8 | 34.14 | 6.18 | 24.68 | 327 | 0.10 |
| 73 | - | - | 6.02 | | 50 | 16.8 | 33.93 | 6.41 | 24.76 | 319 | 0.16 |
| 98 | 13.04 | 33.78 | 4.39 | 253 | 75 | 16.8 | 34.18 | 5.95 | 24.95 | 301 | 0.24 |
| 148 | 10.97 | 34.12 | 2.62 | 191 | 100 | 13.00 | 33.78 | 4.23 | 25.47 | 252 | 0.31 |
| 193 | 10.73 | 34.44 | 1.26 | 163 | 150 | 10.94 | 34.15 | 2.52 | 26.14 | 188 | 0.42 |
| 239 | 10.40 | 34.54 | 0.69 | 150 | 200 | 10.70 | 34.47 | 1.12 | 26.44 | 160 | 0.51 |
| 284 | 9.62 | 34.54 | 0.51 | 137 | 250 | 10.25 | 34.54 | 0.61 | 26.57 | 147 | 0.59 |
| 383 | 8.52 | 34.51 | 0.30 | 123 | 300 | 9.39 | 34.54 | 0.47 | 26.71 | 134 | 0.67 |
| 478 | 7.28 | 34.42 | 0.24 | 112 | 400 | 8.32 | 34.50 | 0.27 | 26.85 | 121 | 0.80 |
| 581 | 6.38 | 34.43 | 0.23 | 100 | 500 | 7.07 | 34.42 | 0.24 | 26.97 | 109 | 0.92 |
| | | | | | 600 | (6.23) | (34.43) | | (27.09) | (98) | (1.03) |
| **D1** | HORIZON; April 18, 1952; 1725 GCT; 27°24.5'N, 115°08.1'W; sounding, 950 fm; wind, 290°, force 2; weather, overcast; sea, slight; wire angle, 10°. | | | | | | | | | | |
| 0 | - | 33.44 | 5.65 | | 0 | 15.8 | 33.44 | 5.65 | 24.61 | 333 | 0.00 |
| 9 | 15.83 | 33.44 | 5.63 | 334 | 10 | 15.8 | 33.44 | 5.63 | 24.61 | 333 | 0.03 |
| 24 | - | 33.44 | 5.72 | | 20 | 15.7 | 33.44 | 5.70 | 24.64 | 331 | 0.07 |
| 49 | 14.14 | 33.31 | 5.85 | 309 | 30 | 15.4 | 33.43 | 5.78 | 24.70 | 326 | 0.10 |
| 73 | - | 33.55 | 4.19 | | 50 | 14.1 | 33.31 | 5.85 | 24.88 | 308 | 0.16 |
| 97 | 10.56 | 33.71 | 3.53 | 214 | 75 | 11.8 | 33.57 | 4.18 | 25.54 | 246 | 0.23 |
| 147 | 9.95 | 34.11 | 2.37 | 174 | 100 | 10.61 | 33.73 | 3.49 | 25.88 | 213 | 0.29 |
| 192 | 9.98 | 34.36 | 1.14 | 156 | 150 | 10.13 | 34.16 | 2.28 | 26.29 | 174 | 0.39 |
| 237 | 9.41 | 34.43 | 0.66 | 142 | 200 | 9.93 | 34.39 | 1.02 | 26.51 | 153 | 0.47 |
| 281 | 9.01 | 34.43 | 0.47 | 136 | 250 | 9.29 | 34.43 | 0.59 | 26.65 | 140 | 0.55 |
| 377 | 8.05 | 34.42 | 0.32 | 123 | 300 | 8.90 | 34.42 | 0.43 | 26.70 | 135 | 0.62 |
| 472 | 6.90 | 34.40 | 0.27 | 108 | 400 | 7.67 | 34.42 | 0.30 | 26.89 | 117 | 0.75 |
| 575 | 6.28 | 34.40 | - | 101 | 500 | 6.69 | 34.40 | | 27.01 | 106 | 0.87 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

HORIZON; April 19, 1952; 0505, 0519 GCT; 27°25'N, 115°07'W; sounding, 720 fm; wind, 260°, force 2; weather, partly cloudy; sea, moderate; wire angle, 13°, 13°. D2

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.46 | 5.72 | | 0 | 16.1 | 33.46 | 5.72 | 24.56 | 338 | 0.00 |
| | | | | | 10 | 15.7 | 33.46 | 5.74 | 24.65 | 330 | 0.03 |
| 9 | 15.75 | 33.46 | 5.74 | 331 | 20 | 15.6 | 33.45 | 5.76 | 24.67 | 328 | 0.07 |
| 23 | - | 33.44 | 5.78 | | 30 | 15.4 | 33.38 | 5.81 | 24.66 | 329 | 0.10 |
| 48 | 14.14 | 33.30 | 5.90 | 309 | 50 | 14.1 | 33.30 | 5.89 | 24.87 | 309 | 0.16 |
| 72 | - | 33.40 | 4.69 | | 75 | 12.1 | 33.44 | 4.55 | 25.38 | 261 | 0.23 |
| 96 | 10.70 | 33.71 | 3.54 | 216 | 100 | 10.62 | 33.77 | 3.39 | 25.91 | 211 | 0.29 |
| 145 | 10.00 | 34.09 | 2.46 | 177 | 150 | 10.17 | 34.12 | 2.32 | 26.26 | 177 | 0.39 |
| 188 | - | 34.38 | 1.06 | | 200 | 10.22 | 34.40 | 1.00 | 26.47 | 157 | 0.48 |
| 231 | 9.45 | 34.42 | 0.92 | 144 | | | | | | | |
| 361p | 8.17 | 34.43 | 0.34 | 124 | | | | | | | |
| 474p | 6.95 | 34.43 | 0.23 | 107 | | | | | | | |

HORIZON; April 19, 1952; 0903 GCT; 27°23'N, 115°06.8'W; sounding, 600 fm; wind, 280°, force 4; weather, partly cloudy; sea, moderate; wire angle, 20°. D3

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.46 | 5.73 | | 0 | 16.5 | 33.46 | 5.73 | 24.47 | 347 | 0.00 |
| 9 | 15.80 | 33.48 | 5.74 | 330 | 10 | 15.8 | 33.48 | 5.73 | 24.64 | 330 | 0.03 |
| 23 | - | 33.46 | 5.71 | | 20 | 15.8 | 33.47 | 5.71 | 24.64 | 331 | 0.07 |
| 47 | 14.22 | 33.33 | 5.90 | 309 | 30 | 15.6 | 33.42 | 5.78 | 24.64 | 331 | 0.10 |
| 70 | - | 33.49 | 4.64 | | 50 | 14.0 | 33.33 | 5.88 | 24.92 | 304 | 0.16 |
| 93 | 10.94 | 33.69 | 3.62 | 222 | 75 | 11.8 | 33.54 | 4.40 | 25.51 | 248 | 0.23 |
| 142 | 10.48 | 34.22 | 1.70 | 175 | 100 | 10.86 | 33.75 | 3.32 | 25.85 | 216 | 0.29 |
| 180 | 10.43 | 34.45 | 0.79 | 157 | 150 | 10.70 | 34.30 | 1.48 | 26.30 | 173 | 0.39 |
| 220 | 9.86 | 34.51 | 0.45 | 143 | 200 | 10.20 | 34.50 | 0.56 | 26.55 | 150 | 0.47 |
| 352p | 8.39 | 34.42 | 0.32 | 128 | | | | | | | |
| 492p | 7.07 | 34.45 | 0.29 | 107 | | | | | | | |

HORIZON; April 19, 1952; 1007, 1034 GCT; 27°24.7'N, 115°02.8'W; sounding, 550 fm; wind, 290°, force 3; weather, cloudy; sea, moderate; wire angle, 15°, 20°. D4

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.44 | 5.73 | | 0 | 15.9 | 33.44 | 5.73 | 24.59 | 336 | 0.00 |
| 9 | 15.71 | 33.44 | 5.74 | 331 | 10 | 15.7 | 33.44 | 5.75 | 24.64 | 331 | 0.03 |
| 24 | - | 33.42 | 5.84 | | 20 | 15.4 | 33.43 | 5.81 | 24.70 | 326 | 0.07 |
| 48 | 13.86 | 33.30 | 6.02 | 304 | 30 | 14.9 | 33.39 | 5.89 | 24.77 | 318 | 0.10 |
| 72 | - | 33.62 | 3.87 | | 50 | 13.7 | 33.30 | 6.02 | 24.96 | 300 | 0.16 |
| 94 | 10.95 | 33.82 | 3.38 | 212 | 75 | 11.2 | 33.67 | 3.82 | 25.72 | 228 | 0.23 |
| 139 | 10.99 | 34.31 | 1.31 | 177 | 100 | 10.77 | 33.86 | 3.17 | 25.95 | 206 | 0.28 |
| | | | | | 150 | 11.08 | 34.42 | 0.92 | 26.33 | 170 | 0.38 |
| 178 | 11.01 | 34.52 | 0.59 | 162 | 200 | 10.82 | 34.53 | 0.50 | 26.46 | 158 | 0.46 |
| 221 | 10.45 | 34.54 | 0.44 | 151 | 250 | 10.16 | 34.54 | 0.40 | 26.59 | 146 | 0.54 |
| 264 | 10.02 | 34.54 | 0.40 | 144 | 300 | 9.41 | 34.51 | 0.36 | 26.69 | 136 | 0.61 |
| 355 | 8.29 | 34.45 | 0.32 | 124 | 400 | 7.70 | 34.41 | 0.29 | 26.88 | 118 | 0.75 |
| 446 | 7.22 | 34.43 | 0.25 | 110 | 500 | 6.71 | (34.44) | 0.23 | (27.04) | (103) | (0.86) |
| 547 | 6.34 | 34.61u | 0.22 | | | | | | | | |

HORIZON; April 19, 1952; 1644 GCT; 27°22.1'N, 115°04'W; sounding, 550 fm; wind, 300°, force 3; weather, missing; sea, slight; wire angle, 23°. D5

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.40 | 5.76 | | 0 | 15.9 | 33.40 | 5.76 | 24.56 | 338 | 0.00 |
| 9 | 15.80 | 33.39 | 5.75 | 337 | 10 | 15.8 | 33.39 | 5.76 | 24.58 | 337 | 0.03 |
| 23 | - | 33.37 | 5.90 | | 20 | 15.5 | 33.37 | 5.88 | 24.63 | 332 | 0.07 |
| 46 | 13.77 | 33.33 | 5.90 | 300 | 30 | 14.2 | 33.35 | 5.90 | 24.89 | 307 | 0.10 |
| 69 | - | 33.40 | 4.65 | | 50 | 13.7 | 33.33 | 5.88 | 24.98 | 299 | 0.16 |
| 91 | 11.23 | 33.75 | 3.50 | 222 | 75 | 12.2 | 33.46 | 4.35 | 25.38 | 261 | 0.23 |
| 136 | 11.19 | 34.43 | 1.10 | 171 | 100 | 10.88 | 34.00 | 2.30 | 26.04 | 198 | 0.29 |
| 169 | - | 34.52 | 0.66 | | 150 | 11.27 | 34.48 | 0.89 | 26.34 | 169 | 0.38 |
| 204 | 10.48 | 34.56 | 0.42 | 150 | 200 | 10.58 | 34.56 | 0.43 | 26.53 | 151 | 0.46 |
| 344p | 8.46 | 34.52 | 0.34 | 121 | | | | | | | |
| 465p | 7.18 | 34.47 | 0.24 | 107 | | | | | | | |

SIO

CCOFI
5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

D6 HORIZON; April 19, 1952; 2053 GCT; 27°02.5'N, 115°01.1'W; sounding, 570 fm; wind, 270°, force 3; weather, missing; sea, slight; wire angle, 35°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.44 | 5.76 | | 0 | 15.8 | 33.44 | 5.76 | 24.61 | 333 | 0.00 |
| 8 | 15.79 | 33.39 | 5.71 | 337 | 10 | 15.8 | 33.39 | 5.72 | 24.58 | 337 | 0.03 |
| 20 | - | 33.42 | 5.77 | | 20 | 15.8 | 33.42 | 5.77 | 24.60 | 335 | 0.07 |
| 41 | 15.05 | 33.42 | 5.89 | 319 | 30 | 15.7 | 33.42 | 5.85 | 24.62 | 333 | 0.10 |
| 61 | - | 33.35 | 5.86 | | 50 | 14.4 | 33.39 | 5.87 | 24.88 | 308 | 0.16 |
| 79 | 12.15 | 33.51 | 4.43 | 256 | 75 | 12.2 | 33.39 | 4.80 | 25.32 | 266 | 0.24 |
| 120 | 10.93 | 34.04 | 2.05 | 196 | 100 | 11.43 | 33.88 | 2.70 | 25.85 | 216 | 0.30 |
| 158 | 11.05 | 34.42 | 1.54 | 170 | 150 | 11.04 | 34.34 | 1.59 | 26.27 | 176 | 0.40 |
| 197 | 10.76 | 34.52 | 1.52 | 157 | | | | | | | |
| 294p | 9.37 | 34.49 | 0.39 | 137 | | | | | | | |
| 319 | 9.06 | 34.45 | 0.76 | 135 | | | | | | | |
| 416p | 7.75 | 34.42 | 0.35 | 118 | | | | | | | |

D7 HORIZON; April 20, 1952; 0049 GCT; 27°18.8'N, 115°01'W; sounding, 830 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.42 | 5.69 | | 0 | 15.8 | 33.42 | 5.69 | 24.60 | 335 | 0.00 |
| 9 | 15.72 | 33.44 | 5.73 | 332 | 10 | 15.7 | 33.44 | 5.75 | 24.64 | 331 | 0.03 |
| 23 | - | 33.44 | 5.79 | | 20 | 15.7 | 33.44 | 5.76 | 24.64 | 331 | 0.07 |
| 48 | 13.95 | 33.33 | 5.98 | 303 | 30 | 15.6 | 33.41 | 5.82 | 24.64 | 331 | 0.10 |
| 72 | - | 33.40 | 4.92 | | 50 | 13.9 | 33.33 | 5.97 | 24.94 | 302 | 0.16 |
| 94 | 11.33 | 33.71 | 3.50 | 227 | 75 | 12.3 | 33.44 | 4.78 | 25.34 | 264 | 0.23 |
| 143 | 11.30 | 34.36 | 1.15 | 179 | 100 | 11.33 | 33.82 | 3.13 | 25.82 | 219 | 0.30 |
| 182 | 10.90 | 34.54 | 0.52 | 158 | 150 | 11.39 | 34.41 | 0.91 | 26.26 | 176 | 0.40 |
| 220 | 10.21 | 34.54 | 0.47 | 147 | 200 | 10.55 | 34.55 | 0.49 | 26.52 | 152 | 0.48 |
| 353p | 8.49 | 34.42 | 0.35 | 129 | | | | | | | |
| 477p | 7.04 | 34.42 | 0.26 | 109 | | | | | | | |

D8 HORIZON; April 20, 1952; 0446 GCT; 27°17.1'N, 115°00.4'W; sounding, 710 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 23°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.44 | 5.72 | | 0 | 16.1 | 33.44 | 5.72 | 24.55 | 340 | 0.00 |
| 9 | 15.89 | 33.44 | 5.76 | 335 | 10 | (15.80) | 33.44 | 5.76 | (24.61) | (333) | (0.03) |
| 23 | - | 33.42 | 5.79 | | 20 | (15.60) | 33.43 | 5.78 | (24.65) | (330) | (0.07) |
| 46 | 13.94 | 33.37 | 5.99 | 300 | 30 | (15.00) | 33.40 | 5.84 | (24.76) | (320) | (0.10) |
| 69 | - | 33.53 | 4.44 | | 50 | (13.60) | 33.37 | 5.97 | (25.03) | (294) | (0.16) |
| 91 | 11.29 | 33.82 | 3.46 | 218 | 75 | (12.20) | 33.61 | 4.15 | (25.49) | (250) | (0.23) |
| 136 | 11.15 | 34.34 | 1.21 | 177 | 100 | 11.25 | 33.94 | 3.10 | 25.93 | 209 | (0.29) |
| 173 | 11.09 | 34.47 | 0.82 | 167 | 150 | 11.21 | 34.40 | 1.07 | 26.29 | 174 | (0.38) |
| 209 | 10.67 | 34.54 | 0.44 | 154 | 200 | 10.82 | 34.53 | 0.51 | 26.46 | 158 | (0.47) |
| 284p | 9.72 | 34.51 | 0.82 | 141 | | | | | | | |
| 450p | 7.62 | 34.43 | 0.32 | 116 | | | | | | | |

D9 HORIZON; April 20, 1952; 0855 GCT; 27°16.6'N, 114°59.7'W; sounding, 650 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 23°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.43 | 5.77 | | 0 | 16.2 | 33.43 | 5.77 | 24.52 | 343 | 0.00 |
| 9 | 15.97 | 33.42 | 5.82 | 339 | 10 | 16.0 | 33.42 | 5.82 | 24.55 | 339 | 0.03 |
| 23 | - | 33.42 | 5.83 | | 20 | 15.7 | 33.42 | 5.83 | 24.62 | 333 | 0.07 |
| 50 | 13.47 | 33.42 | 5.57 | 288 | 30 | 14.6 | 33.42 | 5.80 | 24.86 | 310 | 0.10 |
| 74 | - | 33.57 | 3.99 | | 50 | 13.47 | 33.42 | 5.57 | 25.10 | 288 | 0.16 |
| 100 | - | 33.85 | 3.06 | | 75 | 11.8 | 33.57 | 3.99 | 25.54 | 246 | 0.23 |
| 143 | 11.19 | 34.31 | 1.26 | 180 | 100 | 11.0 | 33.85 | 3.06 | 25.90 | 211 | 0.28 |
| 183 | 10.69 | 34.50 | 0.57 | 158 | 150 | 11.18 | 34.39 | 1.09 | 26.29 | 174 | 0.38 |
| 371p | 8.21 | 34.43 | 0.29 | 124 | | | | | | | |
| 507p | 6.90 | 34.34 | 0.24 | 113 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

HORIZON; April 20, 1952; 1027 GCT; 27°13.2'N, 115°00.2'W; sounding, 830 fm; wind, 300°, force 5; weather, missing; sea, moderate; wire angle, 34°. D10

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.42 | 5.78 | | 0 | 16.1 | 33.42 | 5.78 | 24.53 | 341 | 0.00 |
| 12 | 16.02 | 33.44 | 5.77 | 338 | 10 | 16.0 | 33.44 | 5.77 | 24.57 | 338 | 0.03 |
| 29 | - | 33.35 | 5.79 | | 20 | 15.6 | 33.39 | 5.78 | 24.62 | 333 | 0.07 |
| 52 | 13.64 | 33.39 | 5.63 | 293 | 30 | 15.0 | 33.35 | 5.79 | 24.72 | 323 | 0.10 |
| 75 | - | 33.57 | 3.89 | | 50 | 13.7 | 33.38 | 5.66 | 25.02 | 295 | 0.16 |
| 95 | 11.09 | 33.80 | 3.46 | 216 | 75 | 11.7 | 33.58 | 3.89 | 25.56 | 243 | 0.23 |
| 132 | 10.85 | 34.14 | 1.77 | 187 | 100 | 11.00 | 33.84 | 3.35 | 25.89 | 212 | 0.29 |
| 170 | 10.46 | 34.38 | 0.88 | 163 | 150 | 10.67 | 34.27 | 1.29 | 26.29 | 174 | 0.39 |
| 210 | 10.19 | 34.47 | 0.43 | 152 | 200 | 10.26 | 34.46 | 0.45 | 26.51 | 154 | 0.47 |
| 252 | 9.73 | 34.47 | 0.41 | 144 | 250 | 9.76 | 34.47 | 0.42 | 26.60 | 145 | 0.55 |
| 339 | 8.67 | 34.43 | 0.28 | 131 | 300 | 9.12 | 34.44 | 0.34 | 26.68 | 137 | 0.62 |
| 439 | 7.64 | 34.45 | 0.23 | 115 | 400 | 8.06 | 34.45 | 0.25 | 26.85 | 121 | 0.75 |
| 546 | 6.38 | 34.40 | 0.21 | 102 | 500 | 6.91 | 34.42 | 0.22 | 27.00 | 107 | 0.88 |

HORIZON; April 20, 1952; 2116 GCT; 27°06.3'N, 114°58.1'W; sounding, 1800 fm; wind, 290°, force 4; weather, overcast; sea, rough; wire angle, 31°. D12

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.46 | 5.80 | | 0 | 15.8 | 33.46 | 5.80 | 24.63 | 332 | 0.00 |
| 8 | 15.84 | 33.46 | 5.70 | 333 | 10 | 15.8 | 33.45 | 5.71 | 24.62 | 333 | 0.03 |
| 25 | - | 33.40 | 5.78 | | 20 | 15.7 | 33.41 | 5.76 | 24.61 | 333 | 0.07 |
| 51 | 13.83 | 33.44 | 5.71 | 293 | 30 | 15.4 | 33.40 | 5.78 | 24.67 | 328 | 0.10 |
| 76 | - | 33.60 | 4.02 | | 50 | 13.9 | 33.44 | 5.72 | 25.02 | 294 | 0.16 |
| 99 | - | 33.91 | 2.76 | | 75 | 11.5 | 33.60 | 4.08 | 25.62 | 238 | 0.23 |
| 133 | 11.12 | 34.33 | 1.27 | 178 | 100 | 11.3 | 33.95 | 2.76 | 25.92 | 209 | 0.29 |
| 374p | 8.14 | 34.45 | 0.28 | 122 | | | | | | | |
| 497p | 6.98 | 34.43 | 0.26 | 107 | | | | | | | |

HORIZON; April 21, 1952; 0111 GCT; 27°03.9'N, 114°57.6'W; sounding, 1950 fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 27°. D13

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.48 | 5.74 | | 0 | 15.9 | 33.48 | 5.74 | 24.62 | 333 | 0.00 |
| 9 | 15.93 | 33.48 | 5.74 | 333 | 10 | 15.9 | 33.48 | 5.75 | 24.62 | 333 | 0.03 |
| 27 | - | 33.40 | 5.87 | | 20 | 15.7 | 33.41 | 5.83 | 24.61 | 333 | 0.07 |
| 53 | 12.68 | 33.46 | 4.84 | 270 | 30 | 14.7 | 33.40 | 5.84 | 24.82 | 313 | 0.10 |
| 80 | - | 33.62 | 3.83 | | 50 | 13.6 | 33.44 | 5.28 | 25.09 | 289 | 0.16 |
| 106 | - | 33.89 | 3.70 | | 75 | 12.0 | 33.59 | 3.86 | 25.52 | 248 | 0.23 |
| 155 | 11.29 | 34.42 | 0.98 | 174 | 100 | 11.2 | 33.79 | 3.75 | 25.82 | 219 | 0.29 |
| 247p | 9.44 | 34.51 | 0.36 | 137 | 150 | 11.4 | 34.40 | 1.08 | 26.26 | 177 | 0.39 |
| 397p | 7.90 | 34.45 | 0.26 | 118 | | | | | | | |
| 532p | 6.68 | 34.42 | 0.20 | 104 | | | | | | | |

HORIZON; April 21, 1952; 0850 GCT; 26°57.2'N, 115°00.2'W; sounding, 2050 fm; wind, 300°, force 4; weather, cloudy; sea, rough; wire angle, 26°. D15

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.68 | 5.86 | | 0 | 16.2 | 33.68 | 5.86 | 24.71 | 325 | 0.00 |
| 8 | 16.12 | 33.55 | 5.77 | 332 | 10 | 16.1 | 33.50 | 5.79 | 24.59 | 335 | 0.03 |
| 23 | - | 33.44 | 5.86 | | 20 | 15.7 | 33.44 | 5.84 | 24.64 | 331 | 0.07 |
| 49 | 13.93 | 33.48 | 5.60 | 292 | 30 | 14.6 | 33.44 | 5.84 | 24.88 | 308 | 0.10 |
| 72 | 11.75 | 33.64 | 3.88 | 240 | 50 | 14.0 | 33.48 | 5.54 | 25.03 | 293 | 0.16 |
| 97 | - | 33.68 | 2.42 | | 75 | 11.5 | 33.65 | 3.60 | 25.65 | 234 | 0.23 |
| 141 | 11.10 | 33.98 | 1.30 | 203 | 100 | 11.4 | 33.69 | 2.30 | 25.70 | 230 | 0.28 |
| 183 | 10.81 | 34.34 | 0.67 | 172 | 150 | 11.19 | 34.07 | 1.14 | 26.04 | 198 | 0.39 |
| 262p | 9.94 | 34.56 | 0.40 | 141 | | | | | | | |
| 367p | 8.63 | 34.51 | 0.29 | 124 | | | | | | | |

HORIZON; April 21, 1952; 1255 GCT; 26°54.6'N, 114°59.9'W; sounding, 1975 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 25°. D16

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.55 | 5.73 | | 0 | 16.1 | 33.55 | 5.73 | 24.63 | 332 | 0.00 |
| 9 | 16.08 | 33.54 | 5.75 | 332 | 10 | 16.1 | 33.54 | 5.76 | 24.62 | 333 | 0.03 |
| 23 | - | 33.49 | 5.86 | | 20 | 15.6 | 33.50 | 5.84 | 24.70 | 325 | 0.07 |
| 49 | 13.66 | 33.48 | 5.43 | 287 | 30 | 14.6 | 33.48 | 5.79 | 24.91 | 305 | 0.10 |
| 72 | - | 33.62 | 3.86 | | 50 | 13.6 | 33.48 | 5.41 | 25.12 | 286 | 0.16 |
| 97 | 11.15 | 33.97 | 2.59 | 205 | 75 | 11.6 | 33.65 | 3.67 | 25.64 | 236 | 0.22 |
| 140 | 11.31 | 34.31 | 1.17 | 182 | 100 | 11.15 | 34.01 | 2.30 | 26.00 | 202 | 0.28 |
| 180 | 10.90 | 34.47 | 0.85 | 164 | 150 | 11.29 | 34.35 | 1.08 | 26.24 | 179 | 0.37 |
| 222p | 10.37 | 34.54 | 0.56 | 149 | | | | | | | |
| 313p | 9.29 | 34.51 | 0.39 | 134 | | | | | | | |

SIO

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

D17 HORIZON; April 21, 1952; 1737, 1810 GCT; 26°51.5'N, 115°00.7'W; sounding, 1800 fm; wind, 300°, force 3; weather, missing; sea, moderate; wire angle, 22°, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.51 | 5.77 | | 0 | 16.1 | 33.51 | 5.77 | 24.60 | 335 | 0.00 |
| 9 | 16.02 | 33.49 | 5.75 | 334 | 10 | 16.0 | 33.48 | 5.75 | 24.60 | 335 | 0.03 |
| 23 | - | 33.40 | 5.88 | | 20 | 15.7 | 33.41 | 5.85 | 24.61 | 333 | 0.07 |
| 51 | 13.90 | 33.42 | 5.76 | 296 | 30 | 14.9 | 33.40 | 5.86 | 24.78 | 317 | 0.10 |
| 73 | - | 33.55 | 4.38 | | 50 | 14.0 | 33.42 | 5.78 | 24.99 | 298 | 0.16 |
| 100 | 11.16 | 33.75 | 3.48 | 221 | 75 | 12.0 | 33.57 | 4.30 | 25.50 | 249 | 0.23 |
| 144 | 11.25 | 34.27 | 1.45 | 184 | 100 | 11.16 | 33.75 | 3.48 | 25.79 | 221 | 0.29 |
| 186 | 10.92 | 34.49 | 0.85 | 162 | 150 | 11.23 | 34.30 | 1.32 | 26.21 | 182 | 0.39 |
| | | | | | 200 | 10.88 | 34.55 | 0.63 | 26.47 | 157 | 0.48 |
| 226 | 10.46 | 34.58 | 0.44 | 148 | 250 | 9.92 | 34.56 | 0.39 | 26.64 | 141 | 0.56 |
| 265 | 9.58 | 34.54 | 0.37 | 137 | 300 | 9.08 | 34.51 | 0.32 | 26.74 | 131 | 0.63 |
| 359 | 8.28 | 34.49 | 0.27 | 121 | 400 | 7.77 | 34.47 | 0.27 | 26.91 | 115 | 0.76 |
| 457 | 7.16 | 34.43 | 0.30 | 110 | 500 | 6.76 | 34.42 | 0.32 | 27.02 | 105 | 0.87 |
| 560 | 6.24 | 34.43 | 0.34 | 98 | | | | | | | |

D18 HORIZON; April 21, 1952; 2056 GCT; 26°48.5'N, 115°02.7'W; sounding, 1720 fm; wind, 290°, force 3; weather, missing; sea, moderate; wire angle, 19°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.48 | 5.73 | | 0 | 16.1 | 33.48 | 5.73 | 24.58 | 337 | 0.00 |
| 9 | 16.04 | 33.49 | 5.75 | 335 | 10 | 16.0 | 33.49 | 5.75 | 24.61 | 334 | 0.03 |
| 23 | - | 33.46 | 6.16 | | 20 | 15.9 | 33.47 | 6.02 | 24.61 | 333 | 0.07 |
| 47 | 14.01 | 33.35 | 6.62 | 303 | 30 | 15.6 | 33.41 | 6.37 | 24.64 | 331 | 0.10 |
| 70 | - | 33.49 | 4.52 | | 50 | 13.9 | 33.35 | 6.62 | 24.95 | 301 | 0.16 |
| 93 | 11.10 | 33.82 | 3.50 | 215 | 75 | 12.0 | 33.54 | 4.25 | 25.48 | 251 | 0.23 |
| 139 | 10.96 | 34.23 | 1.53 | 182 | 100 | 11.10 | 33.91 | 3.17 | 25.93 | 208 | 0.29 |
| 181 | 10.51 | 34.31 | 1.43 | 169 | 150 | 11.02 | 34.26 | 1.49 | 26.22 | 181 | 0.39 |
| 225 | 10.62 | 34.52 | 0.60 | 155 | 200 | 10.51 | 34.44 | 0.76 | 26.45 | 159 | 0.48 |
| 268 | 9.68 | 34.49 | 0.59 | 142 | 250 | 10.10 | 34.51 | 0.59 | 26.57 | 147 | 0.56 |
| 361 | 8.44 | 34.46 | 0.57 | 125 | 300 | 9.21 | 34.47 | 0.58 | 26.69 | 136 | 0.63 |
| 454 | 7.42 | 34.43 | 0.34 | 113 | 400 | 8.01 | 34.45 | 0.51 | 26.86 | 120 | 0.76 |
| 557 | 6.21 | 34.40 | 0.23 | 100 | 500 | 6.89 | 34.41 | 0.26 | 26.99 | 108 | 0.89 |

D19 HORIZON; April 22, 1952; 0055 GCT; 26°44.2'N, 115°04.5'W; sounding, 1650 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.49 | 5.74 | | 0 | 16.1 | 33.49 | 5.74 | 24.58 | 336 | 0.00 |
| 9 | 16.03 | 33.57 | 5.74 | 329 | 10 | 16.0 | 33.57 | 5.74 | 24.67 | 328 | 0.03 |
| 24 | - | 33.62 | 5.84 | | 20 | 16.0 | 33.61 | 5.81 | 24.70 | 325 | 0.07 |
| 47 | 14.09 | 33.37 | 5.94 | 303 | 30 | 15.3 | 33.61 | 5.89 | 24.86 | 310 | 0.10 |
| 71 | - | 33.60 | 4.32 | | 50 | 14.0 | 33.37 | 5.91 | 24.95 | 302 | 0.16 |
| 94 | 11.24 | 33.77 | 3.38 | 221 | 75 | 12.1 | 33.65 | 4.18 | 25.54 | 245 | 0.23 |
| 142 | 10.78 | 34.20 | 1.75 | 181 | 100 | 11.11 | 33.81 | 3.12 | 25.85 | 216 | 0.29 |
| 185 | 10.29 | 34.33 | 1.42 | 164 | 150 | 11.12 | 34.25 | 1.69 | 26.19 | 184 | 0.39 |
| 230 | 9.74 | 34.42 | 0.98 | 148 | 200 | 10.06 | 34.36 | 1.28 | 26.46 | 158 | 0.47 |
| 273 | 9.41 | 34.47 | 0.51 | 139 | 250 | 9.58 | 34.45 | 0.68 | 26.61 | 143 | 0.55 |
| 366 | 8.42 | 34.47 | 0.35 | 124 | 300 | 9.19 | 34.47 | 0.44 | 26.69 | 136 | 0.62 |
| 457 | 7.29 | 34.45 | 0.32 | 110 | 400 | 7.99 | 34.46 | 0.32 | 26.87 | 119 | 0.76 |
| | | | | | 500 | (6.75) | (34.45) | | (27.04) | (103) | (0.88) |

D20 HORIZON; April 22, 1952; 0453 GCT; 26°41.3'N, 115°05.6'W; sounding, 1700 fm; wind, 310°, force 3; weather, clear; sea, rough; wire angle, 24°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.53 | 5.67 | | 0 | 16.5 | 33.53 | 5.67 | 24.52 | 342 | 0.00 |
| 9 | 16.04 | 33.53 | 5.80 | 332 | 10 | 16.0 | 33.53 | 5.82 | 24.64 | 331 | 0.03 |
| 23 | - | 33.46 | 5.84 | | 20 | 15.8 | 33.48 | 5.84 | 24.64 | 330 | 0.07 |
| 46 | 14.07 | 33.37 | 5.95 | 303 | 30 | 14.6 | 33.43 | 5.88 | 24.87 | 309 | 0.10 |
| 68 | - | 33.55 | 4.56 | | 50 | 14.1 | 33.37 | 5.94 | 24.93 | 304 | 0.16 |
| 90 | 11.43 | 33.78 | 3.52 | 224 | 75 | 11.8 | 33.62 | 4.25 | 25.58 | 242 | 0.23 |
| 136 | 11.48 | 34.38 | 1.09 | 180 | 100 | 11.19 | 33.93 | 2.47 | 25.93 | 208 | 0.29 |
| 174 | 10.14 | 34.27 | 1.38 | 166 | 150 | 11.00 | 34.35 | 1.16 | 26.29 | 174 | 0.38 |
| 196p | 9.71 | 34.33 | 1.25 | 154 | | | | | | | |
| 213 | 9.72 | 34.38 | 1.10 | 151 | | | | | | | |
| 313p | 8.82 | 34.51 | 0.44 | 127 | | | | | | | |
| 438p | 7.38 | 34.47 | 0.30 | 110 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

HORIZON; April 22, 1952; 0911, 0955 GCT; 26°38.8'N, 115°04'W; sounding, 1690 fm; wind, 310°, force 3; weather, clear; sea, rough; wire angle, 20°, 28°. D21

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.55 | 5.74 | | 0 | 16.5 | 33.55 | 5.74 | 24.54 | 341 | 0.00 |
| 8 | 16.19 | 33.55 | 5.79 | 334 | 10 | 16.2 | 33.55 | 5.81 | 24.61 | 334 | 0.03 |
| | | | | | 20 | 16.0 | 33.49 | 5.89 | 24.61 | 334 | 0.07 |
| 22 | - | 33.48 | 5.90 | | 30 | 15.5 | 33.45 | 5.90 | 24.69 | 326 | 0.10 |
| 48 | 14.17 | 33.44 | 5.89 | 300 | 50 | 14.1 | 33.44 | 5.85 | 24.98 | 298 | 0.16 |
| 69 | - | 33.57 | 4.23 | | 75 | 12.2 | 33.64 | 4.06 | 25.52 | 248 | 0.23 |
| 91 | - | 33.80 | 3.46 | | 100 | 11.3 | 33.92 | 2.91 | 25.90 | 211 | 0.29 |
| 132 | 11.81 | 34.31 | 1.07 | 191 | 150 | 11.37 | 34.29 | 1.30 | 26.18 | 185 | 0.39 |
| 171 | 10.52 | 34.25 | 1.59 | 173 | 200 | 10.15 | 34.34 | 1.39 | 26.43 | 161 | 0.48 |
| 218 | 9.95 | 34.38 | 1.11 | 154 | 250 | 9.52 | 34.38 | | 26.57 | 148 | 0.56 |
| 258 | 9.42 | 34.27u | 0.18u | | 300 | 8.87 | 34.41 | | 26.70 | 135 | 0.63 |
| 352 | 8.26 | 34.45 | 0.40 | 123 | 400 | 7.73 | 34.41 | 0.32 | 26.87 | 119 | 0.76 |
| 449 | 7.26 | 34.38 | 0.28 | 115 | 500 | 6.90 | 34.41 | 0.27 | 26.99 | 108 | 0.88 |
| 553 | 6.58 | 34.45 | 0.27 | 101 | | | | | | | |

HORIZON; April 22, 1952; 1304 GCT; 26°37.2'N, 115°02.9'W; sounding, 1760 fm; wind, 040°, force 5; weather, clear; sea, missing; wire angle, 25°. D22

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.57 | 5.32 | | 0 | 16.2 | 33.57 | 5.32 | 24.62 | 333 | 0.00 |
| 9 | 16.15 | 33.53 | 5.87 | 334 | 10 | 16.1 | 33.53 | 5.87 | 24.62 | 333 | 0.03 |
| 23 | - | 33.48 | 5.87 | | 20 | 16.0 | 33.49 | 5.87 | 24.61 | 334 | 0.07 |
| 48 | 14.17 | 33.35 | 5.91 | 306 | 30 | 15.2 | 33.45 | 5.88 | 24.75 | 320 | 0.10 |
| 70 | - | 33.57 | 4.95 | | 50 | 14.1 | 33.35 | 5.89 | 24.91 | 305 | 0.16 |
| 93 | - | 33.71 | 3.78 | | 75 | 12.0 | 33.62 | 4.68 | 25.54 | 245 | 0.23 |
| 129 | 11.82 | 34.25 | 1.13 | 196 | 100 | 11.1 | 33.76 | 3.02 | 25.81 | 219 | 0.29 |
| 165 | - | 34.25 | 1.56 | | 150 | 10.58 | 34.25 | 1.47 | 26.29 | 174 | 0.39 |
| 207 | 9.93 | 34.36 | 1.41 | 156 | 200 | 10.04 | 34.34 | 1.45 | 26.45 | 159 | 0.48 |
| 245 | 9.49 | 34.42 | 1.03 | 144 | 250 | 9.45 | 34.43 | 0.98 | 26.62 | 143 | 0.55 |
| 334 | 8.62 | 34.49 | 0.37 | 126 | 300 | 8.99 | 34.48 | 0.47 | 26.73 | 132 | 0.62 |
| 429 | 7.55 | 34.43 | 0.31 | 115 | 400 | 7.81 | 34.45 | 0.32 | 26.89 | 117 | 0.75 |
| 531 | 6.85 | 34.43 | 0.23 | 106 | 500 | 7.04 | 34.42 | 0.26 | 26.98 | 109 | 0.88 |

HORIZON; April 22, 1952; 1700 GCT; 26°33.5'N, 115°02.7'W; sounding, 1800 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 32°. D23

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | - | 5.74 | | 0 | 16.1 | 33.51 | 5.74 | 24.60 | 335 | 0.00 |
| 8 | 16.09 | 33.51 | 5.74 | 335 | 10 | 16.1 | 33.51 | 5.74 | 24.60 | 335 | 0.03 |
| 21 | - | 33.55 | 5.74 | | 20 | 16.1 | 33.55 | 5.74 | 24.63 | 332 | 0.07 |
| 46 | 14.41 | 33.35 | 6.04 | 311 | 30 | 16.1 | 33.50 | 5.80 | 24.59 | 335 | 0.10 |
| 68 | - | 33.48 | 5.67 | | 50 | 14.3 | 33.35 | 6.02 | 24.87 | 309 | 0.16 |
| 90 | - | 33.57 | 3.99 | | 75 | 12.8 | 33.51 | 5.32 | 25.30 | 268 | 0.24 |
| 130 | 11.63 | 34.15 | 1.53 | 200 | 100 | 11.1 | 33.72 | 3.00 | 25.78 | 222 | 0.30 |
| 166 | 10.53 | 34.22 | 1.68 | 176 | 150 | 11.48 | 34.20 | 1.63 | 26.09 | 193 | 0.40 |
| 249p | 9.56 | 34.34 | 0.43 | 151 | | | | | | | |
| 333p | 8.79 | 34.42 | 1.04 | 133 | | | | | | | |
| 428p | 7.38 | 34.38 | 0.33 | 116 | | | | | | | |

HORIZON; April 22, 1952; 2113 GCT; 26°30.3'N, 115°04.6'W; sounding, 1850 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 31°. D24

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.46 | 5.74 | | 0 | 16.1 | 33.46 | 5.74 | 24.56 | 338 | 0.00 |
| 8 | 16.08 | 33.44 | 5.74 | 339 | 10 | 16.0 | 33.44 | 5.75 | 24.57 | 338 | 0.03 |
| 25 | - | 33.44 | 5.81 | | 20 | 16.0 | 33.44 | 5.78 | 24.57 | 338 | 0.07 |
| 50 | 14.18 | 33.44 | 5.84 | 306 | 30 | 15.9 | 33.44 | 5.82 | 24.59 | 336 | 0.10 |
| 75 | - | 33.57 | 3.98 | | 50 | 14.48 | 33.44 | 5.84 | 24.90 | 306 | 0.17 |
| 98 | - | 33.89 | 2.77 | | 75 | 12.6 | 33.58 | 3.98 | 25.39 | 259 | 0.24 |
| 145 | 10.39 | 34.09 | 1.92 | 183 | 100 | 11.5 | 33.90 | 2.69 | 25.85 | 216 | 0.30 |
| 193 | - | 34.31 | 1.19 | | 150 | 10.34 | 34.11 | 1.86 | 26.22 | 181 | 0.40 |
| 241 | 9.68 | 34.40 | 0.71 | 149 | 200 | 9.96 | 34.34 | 1.12 | 26.46 | 158 | 0.48 |
| 290 | 9.39 | 34.38 | 0.44 | 146 | 250 | 9.63 | 34.40 | 0.65 | 26.57 | 148 | 0.56 |
| 387 | 8.24 | 34.40 | 0.31 | 127 | 300 | 9.33 | 34.38 | 0.40 | 26.60 | 145 | 0.64 |
| 493 | 6.94 | 34.37 | 0.36 | 111 | 400 | 8.06 | 34.39 | 0.31 | 26.81 | 125 | 0.78 |
| 600 | 6.21 | 34.36 | 0.17 | 103 | 500 | 6.88 | 34.37 | 0.36 | 26.96 | 110 | 0.90 |
| | | | | | 600 | 6.21 | 34.36 | 0.17 | 27.04 | 103 | 1.02 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| D25 | HORIZON; April 23, 1952; 0101 GCT; 26°26.1'N, 115°03'W; sounding, 1650 fm; wind, 350°, force 4; weather, cloudy; sea, moderate; wire angle, 21°. | | | | | | | | | | |
| 0 | - | 33.48 | 5.89 | | 0 | 16.1 | 33.48 | 5.89 | 24.58 | 337 | 0.00 |
| 9 | 16.08 | 33.48 | 5.32 | 337 | 10 | 16.0 | 33.48 | 5.32 | 24.60 | 335 | 0.03 |
| 23 | - | 33.39 | 5.38 | | 20 | 15.6 | 33.40 | 5.35 | 24.63 | 332 | 0.07 |
| 51 | 14.38 | 33.51 | 6.00 | 299 | 30 | 15.4 | 33.40 | 5.54 | 24.67 | 328 | 0.10 |
| 74 | - | 33.55 | 4.15 | | 50 | 14.4 | 33.51 | 6.00 | 24.97 | 299 | 0.16 |
| 100 | 11.25 | 33.87 | 3.01 | 214 | 75 | 11.9 | 33.55 | 4.14 | 25.50 | 249 | 0.23 |
| 146 | 10.35 | 34.14 | 1.85 | 179 | 100 | 11.25 | 33.87 | 3.01 | 25.87 | 214 | 0.29 |
| 192 | - | 34.25 | 1.28 | | 150 | 10.31 | 34.15 | 1.78 | 26.26 | 177 | 0.39 |
| 242 | 10.05 | 34.49 | 0.54 | 148 | 200 | 10.13 | 34.27 | 1.17 | 26.38 | 165 | 0.48 |
| 286 | 9.26 | 34.45 | 0.38 | 138 | 250 | 10.01 | 34.49 | 0.50 | 26.57 | 147 | 0.56 |
| 388 | 8.06 | 34.38 | 0.29 | 126 | 300 | 9.05 | 34.44 | 0.36 | 26.69 | 136 | 0.63 |
| 489 | 6.90 | 34.38 | 0.27 | 110 | 400 | 7.88 | 34.38 | 0.28 | 26.83 | 123 | 0.77 |
| 595 | 6.11 | 34.38 | 0.24 | 100 | 500 | 6.82 | 34.38 | 0.27 | 26.98 | 109 | 0.89 |
| | | | | | 600 | (6.08) | (34.38) | (0.24) | (27.07) | (100) | (1.00) |
| D26 | HORIZON; April 23, 1952; 0450 GCT; 26°22.7'N, 115°03.9'W; sounding, 1810 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | - | 33.48 | 5.81 | | 0 | 16.3 | 33.48 | 5.81 | 24.53 | 341 | 0.00 |
| 9 | 16.11 | 33.49 | 5.79 | 336 | 10 | 16.1 | 33.48 | 5.79 | 24.58 | 337 | 0.03 |
| 23 | - | 33.39 | 5.88 | | 20 | 15.6 | 33.40 | 5.86 | 24.63 | 332 | 0.07 |
| 53 | 14.31 | 33.37 | 6.00 | 308 | 30 | 15.2 | 33.37 | 5.93 | 24.69 | 326 | 0.10 |
| 74 | - | 33.46 | 4.51 | | 50 | 14.0 | 33.37 | 6.00 | 24.94 | 302 | 0.16 |
| 101 | 11.24 | 33.60 | 3.70 | 234 | 75 | 13.0 | 33.47 | 4.46 | 25.23 | 275 | 0.24 |
| 132p | 10.80 | 34.14 | 1.76 | 186 | 100 | 11.2 | 33.60 | 3.72 | 25.67 | 233 | 0.30 |
| 145 | 10.59 | 34.14 | 1.89 | 183 | | | | | | | |
| 183 | 9.97 | - | 1.27 | | | | | | | | |
| 247p | 9.37 | 34.49 | 0.34 | 137 | | | | | | | |
| 382p | 7.95 | 34.45 | 0.24 | 119 | | | | | | | |
| 533p | 6.51 | 34.36 | 0.24 | 106 | | | | | | | |
| D27 | HORIZON; April 23, 1952; 0855 GCT; 26°20.1'N, 115°03.3'W; sounding, 2040 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 22°. | | | | | | | | | | |
| 0 | - | 33.48 | 5.79 | | 0 | 16.4 | 33.48 | 5.79 | 24.51 | 343 | 0.00 |
| 9 | 16.26 | 33.48 | 5.79 | 340 | 10 | 16.2 | 33.48 | 5.79 | 24.55 | 339 | 0.03 |
| 23 | - | 33.46 | 5.80 | | 20 | 16.1 | 33.47 | 5.80 | 24.57 | 338 | 0.07 |
| 51 | 14.52 | 33.37 | 5.94 | 312 | 30 | 15.8 | 33.43 | 5.83 | 24.61 | 334 | 0.10 |
| 74 | - | 33.40 | 5.21 | | 50 | 14.6 | 33.37 | 5.94 | 24.82 | 314 | 0.17 |
| 100 | - | 33.62 | 3.73 | | 75 | 13.3 | 33.40 | 5.17 | 25.11 | 286 | 0.24 |
| 145 | 11.11 | 34.10 | 2.15 | 194 | 100 | 11.6 | 33.62 | 3.73 | 25.61 | 238 | 0.31 |
| 190 | 10.21 | 34.33 | 1.44 | 162 | 150 | 10.99 | 34.13 | 2.08 | 26.12 | 190 | 0.42 |
| 239 | 10.35 | 34.60 | 0.43 | 145 | 200 | 10.21 | 34.42 | 1.28 | 26.48 | 156 | 0.50 |
| 281 | 9.74 | 34.54 | 0.35 | 139 | 250 | 10.27 | 34.59 | 0.40 | 26.61 | 144 | 0.58 |
| 381 | 8.28 | 34.47 | 0.29 | 122 | 300 | 9.44 | 34.52 | 0.32 | 26.69 | 136 | 0.66 |
| 481 | 6.91 | 34.40 | 0.27 | 109 | 400 | 8.02 | 34.46 | 0.28 | 26.87 | 119 | 0.79 |
| 587 | 6.04 | 34.47 | 0.20 | 92 | 500 | 6.72 | 34.41 | 0.27 | 27.01 | 105 | 0.91 |
| | | | | | 600 | (5.97) | (34.48) | | (27.17) | (91) | (1.01) |
| D28 | HORIZON; April 23, 1952; 1300 GCT; 26°15.8'N, 115°00.2'W; sounding, 1800 fm; wind, 320°, force 4; weather, partly cloudy; sea, slight; wire angle, 24°. | | | | | | | | | | |
| 0 | - | 33.55 | 5.79 | | 0 | 16.3 | 33.55 | 5.79 | 24.59 | 336 | 0.00 |
| 9 | 16.23 | 33.51 | 5.81 | 338 | 10 | 16.2 | 33.51 | 5.80 | 24.58 | 337 | 0.03 |
| 23 | - | 33.53 | 5.77 | | 20 | 16.2 | 33.53 | 5.77 | 24.59 | 335 | 0.07 |
| 50 | 14.52 | 33.42 | 6.00 | 308 | 30 | 16.1 | 33.51 | 5.82 | 24.60 | 335 | 0.10 |
| 72 | - | 33.53 | 4.67 | | 50 | 14.5 | 33.42 | 6.00 | 24.88 | 308 | 0.17 |
| 98 | - | 33.71 | 3.58 | | 75 | 12.8 | 33.56 | 4.56 | 25.34 | 265 | 0.24 |
| 143 | 10.96 | 34.22 | 1.70 | 183 | 100 | 11.6 | 33.72 | 3.39 | 25.69 | 231 | 0.30 |
| 188 | - | 34.36 | 1.25 | | 150 | 10.72 | 34.26 | 1.63 | 26.27 | 176 | 0.40 |
| 241 | 10.54 | 34.58 | 0.44 | 149 | 200 | 10.21 | 34.49 | 0.82 | 26.54 | 151 | 0.49 |
| 279 | 9.86 | 34.54 | 0.37 | 141 | 250 | 10.38 | 34.57 | 0.41 | 26.57 | 147 | 0.56 |
| 380 | 8.20 | 34.48 | 0.27 | 120 | 300 | 9.54 | 34.52 | 0.36 | 26.67 | 138 | 0.64 |
| 479 | 6.96 | 34.42 | 0.29 | 108 | 400 | 7.88 | 34.47 | 0.28 | 26.90 | 117 | 0.77 |
| 585 | 6.05 | 34.43 | 0.25 | 96 | 500 | 6.76 | 34.42 | 0.28 | 27.02 | 105 | 0.89 |
| | | | | | 600 | (5.94) | (34.43) | | (27.13) | (94) | (1.00) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

HORIZON; April 23, 1952; 1701 GCT; 26°12'N, 115°00'W; sounding, 1450 fm; wind, 310°, force 4; weather, clear; sea, missing; wire angle, 31°. D29

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.53 | 5.71 | | 0 | 16.2 | 33.53 | 5.71 | 24.59 | 335 | 0.00 |
| 8 | 16.19 | 33.53 | 5.79 | 335 | 10 | 16.2 | 33.53 | 5.81 | 24.59 | 335 | 0.03 |
| 21 | - | 33.49 | 5.93 | | 20 | 16.0 | 33.49 | 5.92 | 24.61 | 334 | 0.07 |
| 47 | 14.62 | 33.39 | 5.98 | 312 | 30 | 15.5 | 33.44 | 5.96 | 24.68 | 327 | 0.10 |
| 68 | - | 33.51 | 5.85 | | 50 | 14.8 | 33.39 | 5.97 | 24.80 | 316 | 0.16 |
| 92 | 12.24 | 33.57 | 4.40 | 253 | 75 | 13.2 | 33.54 | 5.76 | 25.24 | 274 | 0.24 |
| 133 | 11.15 | 34.07 | 2.27 | 197 | 100 | 11.62 | 33.59 | 3.67 | 25.59 | 241 | 0.30 |
| 173 | 10.17 | 34.27 | 1.53 | 166 | 150 | 10.50 | 34.19 | 1.92 | 26.25 | 177 | 0.41 |
| 218 | 10.52 | 34.58 | 0.44 | 149 | 200 | 10.82 | 34.55 | 0.53 | 26.48 | 156 | 0.50 |
| 258 | 9.44 | 34.45 | 0.60 | 141 | 250 | 9.58 | 34.47 | 0.60 | 26.63 | 142 | 0.57 |
| 351 | 8.36 | 34.47 | 0.28 | 123 | 300 | 8.87 | 34.45 | 0.43 | 26.73 | 132 | 0.64 |
| 448 | 7.41 | 34.43 | 0.26 | 113 | 400 | 7.89 | 34.45 | 0.26 | 26.88 | 118 | 0.77 |
| 551 | 6.28 | 34.43 | 0.23 | 98 | 500 | 6.83 | 34.44 | 0.24 | 27.02 | 105 | 0.89 |

HORIZON; April 23, 1952; 2040, 2109 GCT; 26°10.2'N, 114°59.2'W; sounding, 730 fm; wind, 310°, force 4; weather, clear; sea, missing; wire angle, 20°, 20°. D30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.51 | 5.71 | | 0 | 16.2 | 33.51 | 5.71 | 24.58 | 337 | 0.00 |
| 9 | 16.19 | 33.51 | 5.74 | 337 | 10 | 16.2 | 33.51 | 5.74 | 24.58 | 337 | 0.03 |
| 23 | - | 33.49 | 5.74 | | 20 | 16.2 | 33.49 | 5.74 | 24.56 | 338 | 0.07 |
| 51 | 14.62 | 33.42 | 6.03 | 310 | 30 | 16.1 | 33.46 | 5.77 | 24.56 | 338 | 0.10 |
| 74 | - | 33.53 | 5.65 | | 50 | 14.7 | 33.42 | 6.02 | 24.84 | 312 | 0.17 |
| 101 | - | 33.66 | 3.99 | | 75 | 12.7 | 33.54 | 5.57 | 25.34 | 264 | 0.24 |
| 146 | 10.69 | 34.14 | 1.53 | 184 | 100 | 11.6 | 33.65 | 4.25 | 25.64 | 236 | 0.30 |
| 190 | 10.83 | 34.47 | 1.18 | 162 | 150 | 10.62 | 34.20 | 1.46 | 26.24 | 179 | 0.41 |
| 239 | 9.40 | 34.36 | 0.69 | 147 | 200 | 10.80 | 34.47 | 1.12 | 26.42 | 162 | 0.49 |
| 281 | 8.92 | 34.40 | 0.41 | 137 | 250 | 9.23 | 34.37 | 0.57 | 26.61 | 144 | 0.57 |
| 380 | 8.08 | 34.47 | 0.28 | 119 | 300 | 8.77 | 34.42 | 0.37 | 26.72 | 133 | 0.65 |
| 478 | 6.84 | 34.43 | 0.23 | 105 | 400 | 7.86 | 34.47 | 0.26 | 26.90 | 116 | 0.78 |
| | | | | | 500 | 6.66 | 34.42 | 0.23 | 27.03 | 104 | 0.89 |
| 603 | 5.99 | 34.41 | 0.24 | 96 | 600 | 6.02 | 34.41 | 0.24 | 27.11 | 97 | 1.00 |

CREST; April 18, 1952; 1725 GCT; 27°15.8'N, 114°54.9'W; sounding, 450 fm; wind, 280°, force 3; weather, overcast; sea, slight; wire angle, 12°. 123.41 K1

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.68 | 5.63 | | 0 | 16.2 | 33.68 | 5.63 | 24.71 | 325 | 0.00 |
| 10 | 16.18 | 33.66 | 5.63 | 326 | 10 | 16.18 | 33.66 | 5.63 | 24.70 | 326 | 0.03 |
| 24 | - | 33.68 | 5.63 | | 20 | 16.1 | 33.68 | 5.63 | 24.73 | 322 | 0.06 |
| 48 | 13.84 | 33.49 | 5.62 | 290 | 30 | 15.9 | 33.67 | 5.63 | 24.77 | 319 | 0.10 |
| 73 | - | 33.64 | 3.88 | | 50 | 13.5 | 33.49 | 5.62 | 25.14 | 283 | 0.16 |
| 96 | 10.67 | 33.93 | 2.78 | 200 | 75 | 11.4 | 33.66 | 3.80 | 25.68 | 232 | 0.22 |
| 146 | 10.53 | 34.22 | 1.65 | 176 | 100 | 10.63 | 33.97 | 2.64 | 26.06 | 196 | 0.28 |
| 192 | 10.40 | 34.54 | 0.58 | 150 | 150 | 10.52 | 34.25 | 1.52 | 26.30 | 173 | 0.37 |
| 237 | 9.91 | 34.54 | 0.33 | 142 | 200 | 10.34 | 34.54 | 0.45 | 26.55 | 149 | 0.45 |
| 282 | - | 34.51 | 0.34 | | 250 | 9.68 | 34.54 | 0.33 | 26.67 | 138 | 0.53 |
| 378 | 8.06 | 34.47 | 0.26 | 119 | 300 | 8.97 | 34.51 | 0.33 | 26.76 | 129 | 0.60 |
| 473 | 7.14 | 34.43 | 0.28 | 109 | 400 | 7.81 | 34.46 | 0.28 | 26.90 | 116 | 0.73 |
| 575 | 6.26 | 34.45 | 0.25 | 97 | 500 | 6.90 | 34.43 | 0.28 | 27.00 | 106 | 0.84 |

CREST; April 18, 1952; 2105 GCT;.27°15.8'N, 114°54.7'W; sounding, 450 fm; wind, 280°, force 3; weather, partly cloudy; sea, slight; wire angle, 14°. 123.41 K2

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.68 | 5.66 | | 0 | 16.2 | 33.68 | 5.66 | 24.71 | 325 | 0.00 |
| 10 | 16.20 | 33.66 | 5.70 | 326 | 10 | 16.20 | 33.66 | 5.70 | 24.69 | 326 | 0.03 |
| 24 | - | 33.62 | 5.68 | | 20 | 16.0 | 33.63 | 5.68 | 24.71 | 324 | 0.07 |
| 48 | 12.60 | 33.45 | 5.85 | 269 | 30 | 15.6 | 33.60 | 5.71 | 24.78 | 317 | 0.10 |
| 73 | - | 33.75 | 3.55 | | 50 | 11.8 | 33.45 | 5.83 | 25.44 | 254 | 0.15 |
| 96 | 10.69 | 33.91 | 2.71 | 201 | 75 | 11.1 | 33.76 | 3.48 | 25.81 | 219 | 0.21 |
| 146 | 10.84 | 34.23 | 1.59 | 180 | 100 | 10.69 | 33.94 | 2.60 | 26.03 | 199 | 0.27 |
| 192 | 10.64 | 34.43 | 0.82 | 162 | 150 | 10.83 | 34.25 | 1.50 | 26.24 | 179 | 0.36 |
| 238 | 10.20 | 34.52 | 0.45 | 148 | 200 | 10.56 | 34.45 | 0.73 | 26.45 | 159 | 0.45 |
| 282 | 9.70 | 34.52 | 0.36 | 140 | 250 | 10.06 | 34.52 | 0.40 | 26.59 | 146 | 0.53 |
| 379 | 8.42 | 34.45 | 0.39 | 126 | 300 | 9.46 | 34.51 | 0.37 | 26.68 | 137 | 0.60 |
| 474 | 7.26 | 34.42 | 0.28 | 112 | 400 | 8.13 | 34.44 | 0.36 | 26.84 | 122 | 0.74 |
| 575 | 6.34 | 34.40 | 0.24 | 101 | 500 | 7.00 | 34.41 | 0.25 | 26.98 | 109 | 0.86 |

SIO.

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5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 123.41 K3 | CREST; April 19, 1952; 0058 GCT; 27°15.8'N, 114°54.9'W; sounding, 450 fm; wind, 290°, force 3; weather, partly cloudy; sea, slight; wire angle, 16°. | | | | | | | | | | |
| 0 | - | 33.60 | 5.65 | | 0 | 16.9 | 33.60 | 5.65 | 24.48 | 346 | 0.00 |
| 10 | 16.32 | 33.68 | 5.68 | 327 | 10 | 16.32 | 33.68 | 5.68 | 24.68 | 327 | 0.03 |
| 24 | - | 33.62 | 4.88u | | 20 | 16.2 | 33.65 | | 24.68 | 327 | 0.07 |
| 48 | 13.99 | 33.39 | 5.89 | 300 | 30 | 16.0 | 33.60 | | 24.69 | 326 | 0.10 |
| 72 | - | 33.49 | 4.16 | | 50 | 13.8 | 33.39 | 5.86 | 25.01 | 296 | 0.16 |
| 94 | 10.70 | 33.82 | 2.86 | 208 | 75 | 11.6 | 33.51 | 3.98 | 25.53 | 246 | 0.23 |
| 142 | 10.46 | 34.16 | 1.65 | 179 | 100 | 10.65 | 33.86 | 2.67 | 25.97 | 204 | 0.29 |
| 185 | 10.64 | 34.51 | 0.82 | 156 | 150 | 10.47 | 34.22 | 1.49 | 26.28 | 175 | 0.38 |
| 230 | 10.33 | 34.54 | 0.43 | 149 | 200 | 10.60 | 34.53 | 0.64 | 26.50 | 154 | 0.47 |
| 273 | 9.80 | 34.51 | 0.35 | 142 | 250 | 10.10 | 34.53 | 0.36 | 26.59 | 146 | 0.54 |
| 366 | 8.37 | 34.43 | 0.24 | 126 | 300 | 9.38 | 34.48 | 0.31 | 26.67 | 138 | 0.62 |
| 460 | 7.28 | 34.43 | 0.30 | 111 | 400 | 7.91 | 34.43 | 0.25 | 26.86 | 120 | 0.75 |
| 562 | 6.20 | 34.40 | 0.23 | 100 | 500 | 6.83 | 34.42 | 0.28 | 27.01 | 106 | 0.87 |
| 123.41 K4 | CREST; April 19, 1952; 0507 GCT; 27°15.8'N, 114°54.9'W; sounding, 450 fm; wind, 310°, force 3; weather, partly cloudy; sea, slight; wire angle, 17°. | | | | | | | | | | |
| 0 | - | 33.64 | 5.65 | | 0 | 16.3 | 33.64 | 5.65 | 24.65 | 330 | 0.00 |
| 9 | 16.27 | 33.58 | 5.63 | 333 | 10 | 16.2 | 33.56 | 5.63 | 24.62 | 333 | 0.03 |
| 23 | - | 33.39 | 5.97 | | 20 | 15.7 | 33.39 | 5.96 | 24.60 | 335 | 0.07 |
| 47 | 12.98 | 33.46 | 4.93 | 275 | 30 | 14.3 | 33.39 | 5.82 | 24.90 | 306 | 0.10 |
| 71 | - | 33.73 | 3.63 | | 50 | 12.5 | 33.49 | 4.73 | 25.34 | 264 | 0.16 |
| 94 | 10.69 | 33.86 | 2.74 | 205 | 75 | 11.1 | 33.75 | 3.47 | 25.81 | 220 | 0.22 |
| 143 | 10.37 | 34.20 | 1.52 | 175 | 100 | 10.62 | 33.90 | 2.56 | 26.01 | 201 | 0.27 |
| 186 | 10.60 | 34.47 | 0.66 | 158 | 150 | 10.36 | 34.25 | 1.36 | 26.32 | 171 | 0.36 |
| 230 | 10.26 | 34.52 | 0.36 | 149 | 200 | 10.55 | 34.51 | 0.50 | 26.49 | 155 | 0.45 |
| 274 | 9.74 | 34.45 | 0.37 | 146 | 250 | 10.05 | 34.50 | 0.37 | 26.57 | 147 | 0.53 |
| 370 | 8.34 | 34.45 | 0.28 | 125 | 300 | 9.38 | 34.45 | 0.36 | 26.65 | 140 | 0.60 |
| 465 | 7.14 | 34.38 | 0.25 | 113 | 400 | 7.92 | 34.43 | 0.27 | 26.86 | 120 | 0.74 |
| 567 | 6.11 | 34.42 | 0.23 | 97 | 500 | 6.77 | 34.39 | 0.24 | 26.99 | 108 | 0.86 |
| 123.41 K5 | CREST; April 19, 1952; 0844 GCT; 27°15.8'N, 114°54.9'W; sounding, 450 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 19°. | | | | | | | | | | |
| 0 | - | 33.58 | 5.67 | | 0 | 16.2 | 33.58 | 5.67 | 24.63 | 332 | 0.00 |
| 9 | 16.18 | 33.68 | 5.67 | 324 | 10 | 16.1 | 33.68 | 5.67 | 24.73 | 322 | 0.03 |
| 23 | - | 33.39 | 5.99 | | 20 | 15.5 | 33.39 | 5.97 | 24.64 | 331 | 0.07 |
| 47 | 12.03 | 33.42 | 4.56 | 261 | 30 | 14.1 | 33.39 | 5.97 | 24.94 | 302 | 0.10 |
| 71 | - | 33.72 | 3.56 | | 50 | 12.0 | 33.43 | 4.40 | 25.39 | 259 | 0.15 |
| 93 | 11.09 | 33.83 | 3.08 | 214 | 75 | 11.1 | 33.75 | 3.45 | 25.81 | 220 | 0.21 |
| 142 | 10.50 | 34.25 | 1.61 | 173 | 100 | 10.96 | 33.89 | 2.92 | 25.94 | 207 | 0.27 |
| 184 | 10.60 | 34.52 | 0.71 | 155 | 150 | 10.51 | 34.31 | 1.39 | 26.35 | 169 | 0.36 |
| 228 | 10.24 | 34.56 | 0.45 | 146 | 200 | 10.55 | 34.55 | 0.57 | 26.52 | 152 | 0.45 |
| 273 | 9.64 | 34.52 | 0.40 | 139 | 250 | 9.96 | 34.54 | 0.42 | 26.62 | 143 | 0.52 |
| 366 | 8.45 | 34.49 | 0.33 | 123 | 300 | 9.31 | 34.51 | 0.39 | 26.70 | 135 | 0.59 |
| 460 | 7.28 | 34.45 | 0.34 | 110 | 400 | 8.01 | 34.47 | 0.34 | 26.88 | 118 | 0.73 |
| 560 | 6.30 | 34.45 | 0.28 | 97 | 500 | 6.85 | 34.45 | 0.33 | 27.03 | 104 | 0.84 |
| 123.41 K6 | CREST; April 19, 1952; 1253, 1305 GCT; 27°15.8'N, 114°54.9'W; sounding, 450 fm; wind, 290°, force 4; weather, overcast; sea, moderate; wire angle, 16°, 16°. | | | | | | | | | | |
| 0 | - | 33.61 | 5.69 | | 0 | 16.2 | 33.61 | 5.69 | 24.65 | 330 | 0.00 |
| 9 | 16.17 | 33.60 | 5.71 | 330 | 10 | 16.1 | 33.60 | 5.71 | 24.67 | 328 | 0.03 |
| 23 | - | 33.60 | 5.66 | | 20 | 16.1 | 33.60 | 5.69 | 24.67 | 328 | 0.07 |
| | | | | | 30 | 15.6 | 33.59 | 5.64 | 24.77 | 318 | 0.10 |
| 53 | 13.81 | 33.49 | 5.53 | 289 | 50 | 13.9 | 33.49 | 5.55 | 25.06 | 291 | 0.16 |
| 76 | - | 33.61 | 3.94 | | 75 | 11.5 | 33.59 | 4.08 | 25.61 | 239 | 0.23 |
| 103 | 10.72 | 33.94 | 2.78 | 200 | 100 | 10.7 | 33.91 | 2.93 | 26.00 | 202 | 0.28 |
| 148 | 10.50 | 34.25 | 1.58 | 173 | 150 | 10.50 | 34.27 | 1.51 | 26.32 | 172 | 0.38 |
| 196 | 10.62 | 34.52 | 0.67 | 155 | 200 | 10.61 | 34.53 | 0.64 | 26.50 | 154 | 0.46 |
| 247 | - | 34.54 | 0.40 | | 250 | 10.11 | 34.54 | 0.40 | 26.59 | 145 | 0.54 |
| 291 | 9.34 | 34.52 | 0.34 | 134 | 300 | 9.21 | 34.51 | 0.34 | 26.72 | 133 | 0.61 |
| 393 | 7.94 | 34.45 | 0.25 | 119 | 400 | 7.86 | 34.45 | 0.25 | 26.88 | 118 | 0.74 |
| 495 | 6.90 | 34.43 | 0.24 | 106 | 500 | 6.85 | 34.43 | 0.24 | 27.01 | 106 | 0.86 |
| 602 | 6.09 | 34.43 | 0.23 | 96 | 600 | 6.11 | 34.43 | 0.24 | 27.11 | 96 | 0.97 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BLACK DOUGLAS; April 19, 1952; 1649 GCT; 27°16'N, 114°55.2'W; sounding, 415 fm; wind, 300°, force 2; weather, cloudy; sea, rough; wire angle, 14°. 123.41 K7

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.57 | 6.52a) | | 0 | 16.1 | 33.57 | 6.52 | 24.65 | 330 | 0.00 |
| 9 | 16.11 | 33.60 | 6.81 | 328 | 10 | 16.1 | 33.60 | 6.81 | 24.67 | 328 | 0.03 |
| 24 | - | 33.62 | 6.57 | | 20 | 16.1 | 33.62 | 6.72 | 24.68 | 327 | 0.07 |
| 48 | 13.82 | 33.58 | 5.89 | 283 | 30 | 15.2 | 33.62 | 6.37 | 24.89 | 308 | 0.10 |
| 72 | - | 33.66 | 4.42 | | 50 | 13.4 | 33.58 | 5.78 | 25.23 | 274 | 0.16 |
| 95 | 10.94 | 33.91 | 3.50 | 206 | 75 | 11.1 | 33.68 | 4.29 | 25.75 | 225 | 0.22 |
| 145 | 10.61 | 34.25 | 1.81 | 175 | 100 | 10.86 | 33.98 | 3.26 | 26.03 | 199 | 0.27 |
| 188 | 10.62 | 34.51 | 1.08 | 156 | 150 | 10.61 | 34.32 | 1.68 | 26.34 | 170 | 0.37 |
| 233 | 10.14 | 34.54 | 0.73 | 146 | 200 | 10.58 | 34.52 | 0.95 | 26.50 | 154 | 0.45 |
| 277 | 9.42 | 34.54 | 0.54 | 134 | 250 | 9.82 | 34.54 | 0.64 | 26.64 | 141 | 0.53 |
| 374 | 8.14 | 34.45 | 0.31 | 122 | 300 | 9.10 | 34.53 | 0.45 | 26.75 | 130 | 0.60 |
| 467 | 7.08 | 34.45 | 0.29 | 107 | 400 | 7.83 | 34.45 | 0.30 | 26.89 | 117 | 0.73 |
| 570 | 6.25 | 34.45 | 0.30 | 96 | 500 | 6.79 | 34.45 | 0.29 | 27.04 | 103 | 0.84 |

BLACK DOUGLAS; April 19, 1952; 2046 GCT; 27°16'N, 114°55.2'W; sounding, 450 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 20°. 123.41 K8

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.57 | 6.44a) | | 0 | 16.4 | 33.57 | 6.44 | 24.58 | 337 | 0.00 |
| 9 | 16.22 | 33.60 | 6.51 | 331 | 10 | 16.1 | 33.60 | 6.52 | 24.67 | 328 | 0.03 |
| 23 | - | 33.44 | 6.61 | | 20 | 15.4 | 33.45 | 6.58 | 24.71 | 324 | 0.07 |
| 47 | 13.69 | 33.55 | 5.93 | 282 | 30 | 14.4 | 33.45 | 6.55 | 24.93 | 304 | 0.10 |
| 70 | - | 33.62 | 4.47 | | 50 | 13.1 | 33.56 | 5.59 | 25.28 | 270 | 0.15 |
| 93 | 10.90 | 33.82 | 3.71 | 212 | 75 | 11.1 | 33.65 | 4.26 | 25.73 | 227 | 0.22 |
| 138 | 10.58 | 34.31 | 1.82 | 170 | 100 | 10.76 | 33.95 | 3.42 | 26.02 | 200 | 0.27 |
| 179 | 10.60 | 34.52 | 0.86 | 155 | 150 | 10.61 | 34.39 | 1.38 | 26.39 | 165 | 0.36 |
| 220 | 10.18 | 34.58 | 0.49 | 143 | 200 | 10.44 | 34.57 | 0.62 | 26.56 | 148 | 0.44 |
| 262 | 9.61 | 34.52 | 0.44 | 139 | 250 | 9.77 | 34.54 | 0.45 | 26.65 | 140 | 0.52 |
| 352 | 8.54 | 34.51 | 0.37 | 123 | 300 | 9.18 | 34.52 | 0.41 | 26.73 | 132 | 0.59 |
| 441 | 7.48 | 34.47 | 0.40 | 111 | 400 | 7.94 | 34.49 | 0.39 | 26.90 | 116 | 0.72 |
| 540 | 6.57 | 34.51 | 0.29 | 96 | 500 | 6.93 | 34.49 | 0.33 | 27.05 | 102 | 0.84 |

BLACK DOUGLAS; April 20, 1952; 0055 GCT; 27°17.5'N, 114°55'W; sounding, 460 fm; wind, 310°, force 2; weather, overcast; sea, rough; wire angle, 15°. 123.41 K9

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.55 | 6.48a) | | 0 | 16.3 | 33.55 | 6.48 | 24.59 | 336 | 0.00 |
| 9 | 16.20 | 33.57 | 6.52 | 333 | 10 | 16.2 | 33.57 | 6.53 | 24.62 | 333 | 0.03 |
| 24 | - | 33.37 | 6.73 | | 20 | 15.7 | 33.40 | 6.71 | 24.61 | 334 | 0.07 |
| 53 | 12.32 | 33.55 | 4.98 | 256 | 30 | 14.2 | 33.37 | 6.56 | 24.91 | 306 | 0.10 |
| 76 | - | 33.78 | 3.90 | | 50 | 12.9 | 33.51 | 5.15 | 25.28 | 270 | 0.16 |
| 104 | 10.90 | 34.02 | 2.81 | 197 | 75 | 11.2 | 33.78 | 3.92 | 25.81 | 220 | 0.22 |
| 151 | 10.38 | 34.25 | - | 171 | 100 | 10.96 | 34.00 | 2.92 | 26.02 | 199 | 0.27 |
| 198 | 10.40 | 34.56 | 1.38 | 148 | 150 | 10.39 | 34.24 | 1.87 | 26.31 | 172 | 0.37 |
| 249 | 10.11 | 34.56 | 0.46 | 144 | 200 | 10.40 | 34.56 | 1.33 | 26.56 | 148 | 0.45 |
| 293 | 9.29 | 34.51 | 0.43 | 134 | 250 | 10.06 | 34.56 | 0.46 | 26.62 | 143 | 0.52 |
| 395 | 8.04 | 34.47 | 0.30 | 119 | 300 | 9.22 | 34.51 | 0.43 | 26.72 | 133 | 0.59 |
| 495 | 6.73 | 34.42 | 0.30 | 105 | 400 | 7.96 | 34.47 | 0.30 | 26.88 | 118 | 0.73 |
| 601 | 5.90 | 34.46 | 0.31 | 91 | 500 | 6.68 | 34.42 | 0.30 | 27.03 | 104 | 0.84 |
| | | | | | 600 | 5.91 | 34.46 | 0.30 | 27.16 | 92 | 0.95 |

BLACK DOUGLAS; April 20, 1952; 0515 GCT; 27°14.5'N, 114°53'W; sounding, 430 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 22°. 123.41 K10

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.57 | 6.46a) | | 0 | 16.3 | 33.57 | 6.46 | 24.60 | 335 | 0.00 |
| 9 | 16.20 | 33.55 | 6.50 | 334 | 10 | 16.2 | 33.55 | 6.52 | 24.61 | 334 | 0.03 |
| 23 | - | 33.48 | 6.62 | | 20 | 16.1 | 33.51 | 6.59 | 24.60 | 335 | 0.07 |
| 46 | 14.03 | 33.35 | 6.82 | 304 | 30 | 14.7 | 33.43 | 6.71 | 24.85 | 311 | 0.10 |
| 68 | - | 33.60 | 4.62 | | 50 | 13.6 | 33.36 | 6.50 | 25.02 | 294 | 0.16 |
| 89 | 11.16 | 33.78 | 3.84 | 219 | 75 | 11.4 | 33.67 | 4.28 | 25.69 | 231 | 0.23 |
| 131 | 10.52 | 34.20 | 1.95 | 177 | 100 | 10.96 | 33.90 | 3.41 | 25.95 | 207 | 0.28 |
| 170 | 10.76 | 34.43 | 0.96 | 164 | 150 | 10.64 | 34.31 | 1.30 | 26.32 | 171 | 0.38 |
| 209 | 10.44 | 34.52 | 0.64 | 152 | 200 | 10.60 | 34.52 | 0.68 | 26.49 | 155 | 0.46 |
| 248 | 9.97 | 34.49 | 0.62 | 147 | 250 | 9.95 | 34.49 | 0.62 | 26.58 | 146 | 0.54 |
| 334 | 8.70 | 34.45 | 0.34 | 130 | 300 | 9.14 | 34.46 | 0.48 | 26.69 | 136 | 0.61 |
| 421 | 7.90 | 34.45 | 0.25 | 118 | 400 | 8.12 | 34.45 | 0.25 | 26.84 | 121 | 0.75 |
| 519 | 6.60 | 34.42 | 0.24 | 103 | 500 | 6.93 | 34.43 | 0.25 | 27.00 | 107 | 0.87 |



a) All oxygen values appear to be approximately 15 per cent high.

SIO

CCOFI 5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

123.41 K11 BLACK DOUGLAS; April 20, 1952; 0940 GCT; 27°14.5'N, 114°54'W; sounding, 470 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 33°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.51 | 6.49a) | | 0 | 16.0 | 33.51 | 6.49 | 24.62 | 333 | 0.00 |
| 8 | 15.98 | 33.54 | 6.51 | 330 | 10 | 16.0 | 33.54 | 6.53 | 24.65 | 330 | 0.03 |
| 21 | - | 33.49 | 6.57 | | 20 | 15.8 | 33.49 | 6.57 | 24.65 | 330 | 0.07 |
| 46 | 13.54 | 33.48 | 6.65 | 284 | 30 | 14.8 | 33.48 | 6.60 | 24.86 | 310 | 0.10 |
| 67 | - | 33.53 | 4.88 | | 50 | 12.9 | 33.48 | 6.62 | 25.26 | 272 | 0.16 |
| 92 | 11.18 | 33.78 | 3.84 | 219 | 75 | 11.5 | 33.57 | 4.52 | 25.59 | 240 | 0.22 |
| 111p | 10.85 | 34.02 | 0.81 | 196 | 100 | 11.1 | 33.88 | 1.89 | 25.91 | 211 | 0.28 |
| 148p | 10.55 | 34.25 | 0.75 | 174 | | | | | | | |
| 239p | 9.86 | 34.52 | 0.39 | 143 | | | | | | | |
| 334p | 8.60 | 34.52 | 0.28 | 123 | | | | | | | |
| 437p | 7.51 | 34.52 | 0.25 | 108 | | | | | | | |

123.41 K12 BLACK DOUGLAS; April 20, 1952; 1316 GCT; 27°15.5'N, 114°54.5'W; sounding, 450 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 32°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.53 | 6.51a) | | 0 | 15.9 | 33.53 | 6.51 | 24.66 | 329 | 0.00 |
| 10 | 15.84 | 33.53 | 6.53 | 328 | 10 | 15.84 | 33.53 | 6.53 | 24.67 | 328 | 0.03 |
| 22 | - | 33.53 | 6.60 | | 20 | 15.6 | 33.53 | 6.59 | 24.73 | 323 | 0.07 |
| 48 | 13.45 | 33.53 | 5.66 | 279 | 30 | 14.2 | 33.53 | 6.45 | 25.03 | 294 | 0.10 |
| 68 | - | 33.71 | 4.55 | | 50 | 12.1 | 33.53 | 5.53 | 25.45 | 254 | 0.15 |
| 90 | 10.92 | 33.91 | 3.51 | 205 | 75 | 11.0 | 33.79 | 4.26 | 25.85 | 215 | 0.21 |
| 125 | 10.60 | 34.16 | 2.27 | 181 | 100 | 10.78 | 33.99 | 3.11 | 26.05 | 197 | 0.26 |
| 161 | 10.78 | 34.42 | 1.41 | 165 | 150 | 10.76 | 34.34 | 1.63 | 26.32 | 171 | 0.36 |
| 200 | 10.22 | 34.49 | 0.96 | 151 | 200 | 10.22 | 34.49 | 0.96 | 26.54 | 151 | 0.44 |
| 236 | 10.10 | 34.49 | 0.59 | 149 | 250 | 9.93 | 34.49 | 0.54 | 26.59 | 146 | 0.51 |
| 321 | 8.99 | 34.47 | 0.44 | 133 | 300 | 9.27 | 34.47 | 0.48 | 26.68 | 137 | 0.59 |
| 413 | 7.96 | 34.47 | 0.31 | 118 | 400 | 8.13 | 34.47 | 0.32 | 26.86 | 120 | 0.72 |
| 509 | 6.78 | - | 0.24 | | 500 | 6.88 | | 0.24 | | | |

123.41 K13 CREST; April 20, 1952; 1710 GCT; 27°15'N, 114°53.5'W; sounding, 450 fm; wind, 260°, force 2; weather, cloudy; sea, very rough; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.49 | 5.69 | | 0 | 15.8 | 33.49 | 5.69 | 24.65 | 330 | 0.00 |
| 10 | 15.71 | 33.47 | 5.68 | 329 | 10 | 15.71 | 33.47 | 5.68 | 24.66 | 329 | 0.03 |
| 24 | - | 33.46 | 5.70 | | 20 | 15.7 | 33.46 | 5.68 | 24.65 | 330 | 0.07 |
| 48 | 14.00 | 33.31 | 5.89 | 306 | 30 | 15.6 | 33.45 | 5.74 | 24.67 | 328 | 0.10 |
| 72 | - | 33.57 | 4.26 | | 50 | 13.9 | 33.31 | 5.88 | 24.92 | 304 | 0.16 |
| 96 | 11.06 | 33.83 | 3.21 | 214 | 75 | 12.1 | 33.60 | 4.14 | 25.50 | 249 | 0.23 |
| 147 | 10.48 | 34.24 | 1.53 | 173 | 100 | 11.1 | 33.86 | 3.03 | 25.89 | 212 | 0.29 |
| 192 | 10.57 | 34.47 | 0.82 | 158 | 150 | 10.46 | 34.26 | 1.48 | 26.32 | 172 | 0.39 |
| 238 | - | 34.52 | 0.40 | | 200 | 10.56 | 34.49 | 0.72 | 26.48 | 156 | 0.47 |
| 284 | 9.45 | 34.49 | 0.33 | 138 | 250 | 10.06 | 34.52 | 0.37 | 26.59 | 146 | 0.55 |
| 382 | 8.36 | 34.42 | 0.28 | 127 | 300 | 9.26 | 34.47 | 0.31 | 26.68 | 137 | 0.62 |
| 476 | 7.36 | 34.43 | 0.22 | 112 | 400 | 8.16 | 34.42 | 0.26 | 26.82 | 124 | 0.76 |
| 579 | 6.18 | 34.38 | 0.22 | 101 | 500 | 7.09 | 34.42 | 0.22 | 26.97 | 109 | 0.88 |

123.41 K14 CREST; April 20, 1952; 2103 GCT; 27°15'N, 114°53.5'W; sounding, 450 fm; wind, 280°, force 3; weather, overcast; sea, very rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.37 | 5.97 | | 0 | 16.0 | 33.37 | 5.97 | 24.52 | 343 | 0.00 |
| 10 | 15.73 | 33.40 | 5.86 | 335 | 10 | 15.73 | 33.40 | 5.86 | 24.60 | 335 | 0.03 |
| 25 | - | 33.39 | 5.84 | | 20 | 15.5 | 33.39 | 5.85 | 24.64 | 331 | 0.07 |
| 48 | 13.23 | 33.44 | 4.64 | 281 | 30 | 14.7 | 33.39 | 5.81 | 24.82 | 314 | 0.10 |
| 71 | - | 33.75 | 3.68 | | 50 | 12.5 | 33.46 | 4.51 | 25.32 | 266 | 0.16 |
| 94 | 10.78 | 34.05 | 2.67 | 193 | 75 | 11.2 | 33.80 | 3.50 | 25.83 | 218 | 0.22 |
| 141 | 10.53 | 34.22 | 1.80 | 176 | 100 | 10.72 | 34.08 | 2.53 | 26.13 | 189 | 0.27 |
| 184 | 10.40 | 34.40 | 0.87 | 160 | 150 | 10.52 | 34.25 | 1.60 | 26.30 | 173 | 0.36 |
| 228 | - | 34.51 | 0.44 | | 200 | 10.38 | 34.46 | 0.65 | 26.48 | 156 | 0.45 |
| 271 | 9.39 | 34.47 | 0.40 | 139 | 250 | 9.86 | 34.49 | 0.40 | 26.60 | 145 | 0.52 |
| 366 | 8.20 | 34.52 | 0.25 | 117 | 300 | 9.03 | 34.48 | 0.35 | 26.73 | 133 | 0.60 |
| 457 | 7.28 | 34.42 | 0.22 | 112 | 400 | 7.83 | 34.50 | 0.24 | 26.93 | 114 | 0.73 |
| 558 | 6.16 | 34.38 | 0.23 | 101 | 500 | 6.76 | 34.39 | 0.23 | 26.99 | 107 | 0.84 |

a) All oxygen values appear to be approximately 15 per cent high.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; April 21, 1952; 0050, 0110 GCT; 27°15'N, 114°53.5'W; sounding, 450 fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 17°, 20°. | | | | | | | | | | | 123.41 K15 |
| 0 | - | 33.49 | 5.78 | | 0 | 16.0 | 33.49 | 5.78 | 24.61 | 334 | 0.00 |
| 9 | 15.89 | 33.48 | 5.74 | 332 | 10 | 15.9 | 33.48 | 5.74 | 24.62 | 333 | 0.03 |
| 23 | - | 33.40 | 5.85 | | 20 | 15.2 | 33.42 | 5.81 | 24.73 | 322 | 0.07 |
| 48 | 14.08 | 33.39 | 6.06 | 302 | 30 | 14.5 | 33.39 | 5.95 | 24.86 | 310 | 0.10 |
| 72 | - | 33.57 | 4.08 | | 50 | 13.2 | 33.39 | 6.05 | 25.13 | 285 | 0.16 |
| 95 | 11.20 | 33.82 | 3.42 | 217 | 75 | 11.4 | 33.61 | 3.95 | 25.64 | 236 | 0.22 |
| 146 | 10.72 | 34.25 | 1.72 | 177 | 100 | 11.10 | 33.86 | 3.29 | 25.89 | 212 | 0.28 |
| 188 | 10.42 | 34.51 | 0.87 | 153 | 150 | 10.67 | 34.29 | 1.61 | 26.30 | 173 | 0.38 |
| 232 | - | 34.52 | 0.49 | | 200 | 10.32 | 34.52 | 0.70 | 26.54 | 150 | 0.46 |
| | | | | | 250 | 10.07 | 34.52 | 0.49 | 26.59 | 146 | 0.54 |
| 270 | 9.93 | 34.51 | 0.50 | 145 | 300 | 9.46 | 34.50 | 0.44 | 26.67 | 138 | 0.61 |
| 364 | 8.31 | 34.49 | 0.28 | 121 | 400 | 7.90 | 34.51 | 0.27 | 26.92 | 114 | 0.74 |
| 456 | 7.25 | 34.51 | 0.27 | 105 | 500 | 6.79 | 34.49 | 0.25 | 27.07 | 100 | 0.86 |
| 556 | 6.32 | 34.43 | 0.24 | 99 | | | | | | | |
| CREST; April 21, 1952; 0455 GCT; 27°15'N, 114°53.5'W; sounding, 450 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 24°. | | | | | | | | | | | 123.41 K16 |
| 0 | - | 33.53 | 5.71 | | 0 | 16.2 | 33.53 | 5.71 | 24.59 | 335 | 0.00 |
| 9 | 15.97 | 33.51 | 5.74 | 332 | 10 | 16.0 | 33.51 | 5.75 | 24.62 | 333 | 0.03 |
| 23 | - | 33.46 | 5.80 | | 20 | 15.6 | 33.48 | 5.78 | 24.69 | 326 | 0.07 |
| 46 | 14.44 | 33.37 | 5.87 | 310 | 30 | 15.4 | 33.44 | 5.82 | 24.70 | 325 | 0.10 |
| 68 | - | 33.66 | 3.88 | | 50 | 13.7 | 33.38 | 5.79 | 25.02 | 295 | 0.16 |
| 90 | 11.12 | 33.83 | 3.20 | 215 | 75 | 11.5 | 33.72 | 3.62 | 25.71 | 229 | 0.23 |
| 133 | 10.58 | 34.21 | 1.75 | 177 | 100 | 10.85 | 33.92 | 2.92 | 25.98 | 203 | 0.28 |
| 171 | 10.84 | 34.47 | 0.82 | 163 | 150 | 10.72 | 34.35 | 1.29 | 26.34 | 169 | 0.38 |
| 213 | 10.35 | 34.52 | 0.51 | 151 | 200 | 10.61 | 34.52 | 0.55 | 26.49 | 155 | 0.46 |
| 253 | 9.98 | 34.52 | 0.43 | 145 | 250 | 10.01 | 34.52 | 0.44 | 26.60 | 145 | 0.54 |
| 342 | 8.80 | 34.45 | 0.29 | 131 | 300 | 9.37 | 34.48 | 0.34 | 26.67 | 138 | 0.61 |
| 433 | 7.88 | 34.45 | 0.23 | 118 | 400 | 8.20 | 34.45 | 0.24 | 26.83 | 123 | 0.75 |
| 532 | 6.73 | 34.43 | 0.24 | 104 | 500 | 7.10 | 34.43 | 0.24 | 26.98 | 109 | 0.87 |
| CREST; April 21, 1952; 0848 GCT; 27°15'N, 114°53.5'W; sounding, 450 fm; wind, 310°, force 3; weather, clear; sea, rough; wire angle, 17°. | | | | | | | | | | | 123.41 K17 |
| 0 | - | 33.51 | 5.67 | | 0 | 16.0 | 33.51 | 5.67 | 24.62 | 333 | 0.00 |
| 9 | 15.94 | 33.51 | 5.68 | 331 | 10 | 15.9 | 33.51 | 5.68 | 24.65 | 330 | 0.03 |
| 23 | - | 33.37 | 5.70 | | 20 | 15.1 | 33.38 | 5.70 | 24.72 | 323 | 0.07 |
| 53 | 12.08 | 33.51 | 4.42 | 255 | 30 | 14.3 | 33.37 | 5.69 | 24.89 | 307 | 0.10 |
| 76 | - | 33.73 | 3.51 | | 50 | 12.6 | 33.46 | 4.79 | 25.30 | 268 | 0.16 |
| 104 | 10.80 | 33.98 | 2.43 | 198 | 75 | 11.4 | 33.72 | 3.52 | 25.73 | 227 | 0.22 |
| 152 | 10.70 | 34.33 | 1.34 | 170 | 100 | 11.0 | 33.94 | 2.57 | 25.97 | 204 | 0.27 |
| 201 | 10.37 | 34.56 | 0.54 | 148 | 150 | 10.70 | 34.31 | 1.38 | 26.31 | 172 | 0.37 |
| 254 | 9.61 | 34.56 | 0.42 | 136 | 200 | 10.39 | 34.56 | 0.55 | 26.56 | 148 | 0.45 |
| 298 | 9.06 | 34.51 | 0.39 | 131 | 250 | 9.69 | 34.56 | 0.43 | 26.68 | 137 | 0.52 |
| 402 | 8.01 | 34.47 | 0.27 | 118 | 300 | 9.04 | 34.51 | 0.39 | 26.75 | 131 | 0.59 |
| 504 | 6.84 | 34.45 | 0.31 | 104 | 400 | 8.04 | 34.47 | 0.28 | 26.87 | 119 | 0.72 |
| 611 | 6.00 | 34.42 | 0.24 | 96 | 500 | 6.90 | 34.45 | 0.30 | 27.02 | 105 | 0.84 |
| | | | | | 600 | 6.05 | 34.42 | 0.24 | 27.11 | 96 | 0.95 |
| CREST; April 21, 1952; 1256 GCT; 27°15'N, 114°53.5'W; sounding, 450 fm; wind, 340°, force 2; weather, cloudy; sea, rough; wire angle, 22°. | | | | | | | | | | | 123.41 K18 |
| 0 | - | 33.49 | 5.67 | | 0 | 15.8 | 33.49 | 5.67 | 24.65 | 330 | 0.00 |
| 8 | 15.86 | 33.48 | 5.72 | 332 | 10 | 15.9 | 33.48 | 5.74 | 24.62 | 333 | 0.03 |
| 23 | - | 33.42 | 5.78 | | 20 | 15.5 | 33.42 | 5.77 | 24.67 | 329 | 0.07 |
| 46 | 13.28 | 33.45 | 5.19 | 282 | 30 | 15.0 | 33.42 | 5.76 | 24.78 | 318 | 0.10 |
| 69 | - | 33.55 | 4.13 | | 50 | 12.5 | 33.46 | 5.00 | 25.32 | 266 | 0.16 |
| 91 | 11.11 | 33.82 | 3.27 | 215 | 75 | 11.6 | 33.63 | 3.89 | 25.62 | 238 | 0.22 |
| 138 | 13.52 | 34.18 | 1.74 | 233 | 100 | 10.92 | 33.88 | 3.00 | 25.94 | 207 | 0.28 |
| 177 | 10.50 | 34.43 | 1.34 | 160 | 150 | 10.50 | 34.26 | 1.56 | 26.31 | 172 | 0.37 |
| 220 | 10.29 | 34.52 | 0.44 | 150 | 200 | 10.43 | 34.50 | 0.80 | 26.51 | 153 | 0.46 |
| 263 | 9.77 | 34.51 | 0.38 | 142 | 250 | 9.98 | 34.52 | 0.38 | 26.60 | 145 | 0.53 |
| 355 | 8.34 | 34.47 | 0.34 | 123 | 300 | 9.21 | 34.49 | 0.35 | 26.71 | 135 | 0.61 |
| 446 | 7.42 | 34.43 | 0.22 | 113 | 400 | 7.83 | 34.45 | 0.27 | 26.89 | 117 | 0.74 |
| 546 | 6.23 | 34.40 | 0.22 | 100 | 500 | 6.82 | 34.41 | 0.22 | 27.00 | 107 | 0.86 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

123.41
K19

BLACK DOUGLAS; April 21, 1952; 1655, 1753 GCT; 27°16.5'N, 114°55'W (27°15.5'N, 114°54.5'W); sounding, 425 fm; wind, 310°, force 2; weather, cloudy; sea, rough; wire angle, 22°, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.48 | 6.43a) | | 0 | 16.0 | 33.48 | 6.43 | 24.60 | 335 | 0.00 |
| 9 | 15.96 | 33.48 | 6.52 | 334 | 10 | 16.0 | 33.47 | 6.55 | 24.59 | 336 | 0.03 |
| 23 | - | 33.40 | 6.72 | | 20 | 15.5 | 33.42 | 6.70 | 24.67 | 329 | 0.07 |
| 50 | 13.64 | 33.40 | 6.71 | 292 | 30 | 14.4 | 33.39 | 6.72 | 24.88 | 308 | 0.10 |
| 73 | - | 33.64 | 4.55 | | 50 | 13.64 | 33.40 | 6.71 | 25.05 | 292 | 0.16 |
| 98 | 10.90 | 33.91 | 3.57 | 205 | 75 | 11.3 | 33.67 | 4.47 | 25.71 | 229 | 0.22 |
| 143 | 10.50 | 34.22 | 1.91 | 175 | 100 | 10.87 | 33.80 | 3.47 | 25.89 | 212 | 0.28 |
| 183 | 10.27 | 34.41 | 1.12 | 157 | 150 | 10.46 | 33.94 | 1.69 | 26.07 | 195 | 0.38 |
| 234 | 9.92 | 34.51 | 0.60 | 144 | 200 | 10.18 | 34.49 | 0.88 | 26.54 | 150 | 0.47 |
| 276 | 9.36 | 34.43 | 0.62 | 141 | 250 | 9.74 | 34.50 | 0.60 | 26.63 | 142 | 0.55 |
| 375 | 8.30 | 34.43 | 0.49 | 125 | 300 | 9.09 | 34.43 | 0.62 | 26.68 | 137 | 0.62 |
| 474 | 7.22 | 34.43 | 0.40 | 110 | 400 | 8.03 | 34.43 | 0.48 | 26.84 | 122 | 0.76 |
| | | | | | 500 | 7.00 | 34.43 | 0.39 | 26.99 | 108 | 0.88 |
| 500 | 7.00 | 34.45b) | 0.35 | 106 | 600 | 6.14 | | 0.29 | | | |
| 607 | 6.10 | 34.42b) | 0.28 | 97 | | | | | | | |

123.41
K20

BLACK DOUGLAS; April 21, 1952; 2053 GCT; 27°15.5'N, 114°55'W; sounding, 480 fm; wind, 320°, force 3; weather, partly cloudy; sea, very rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.55 | 6.78a) | | 0 | 16.6 | 33.55 | 6.78 | 24.52 | 343 | 0.00 |
| 9 | 16.07 | 33.51 | 6.61 | 334 | 10 | 16.1 | 33.50 | 6.62 | 24.59 | 335 | 0.03 |
| 23 | - | 33.48 | 6.75 | | 20 | 16.0 | 33.49 | 6.71 | 24.61 | 334 | 0.07 |
| 52 | 13.60 | 33.37 | 6.88 | 294 | 30 | 15.1 | 33.46 | 6.82 | 24.78 | 317 | 0.10 |
| 74 | - | 33.69 | 5.06 | | 50 | 13.7 | 33.37 | 6.88 | 25.01 | 296 | 0.16 |
| 101 | 10.92 | 33.89 | 3.58 | 207 | 75 | 11.3 | 33.71 | 4.95 | 25.74 | 226 | 0.23 |
| 147 | 10.43 | 34.27 | 1.99 | 170 | 100 | 10.9 | 33.88 | 3.61 | 25.94 | 207 | 0.28 |
| 194 | 10.36 | 34.46 | 1.12 | 155 | 150 | 10.42 | 34.30 | 1.80 | 26.35 | 168 | 0.38 |
| 244 | 10.15 | 34.52 | 0.58 | 147 | 200 | 10.33 | 34.47 | 1.02 | 26.50 | 154 | 0.46 |
| 287 | 9.38 | 34.49 | 0.55 | 137 | 250 | 10.11 | 34.52 | 0.57 | 26.58 | 147 | 0.54 |
| 387 | 8.15 | 34.49 | 0.47 | 119 | 300 | 9.14 | 34.48 | 0.54 | 26.71 | 134 | 0.61 |
| 487 | 7.12 | 34.45 | 0.37 | 108 | 400 | 8.02 | 34.49 | 0.45 | 26.89 | 117 | 0.74 |
| 591 | 6.01 | 34.45 | 0.27 | 94 | 500 | 6.98 | 34.45 | 0.35 | 27.01 | 106 | 0.86 |
| | | | | | 600 | (5.95) | (34.45) | (0.27) | (27.15) | (93) | (0.97) |

123.41
K21

BLACK DOUGLAS; April 22, 1952; 0115 GCT; 27°15.5'N, 114°56'W; sounding, 670 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.53 | 6.64a) | | 0 | 16.5 | 33.53 | 6.64 | 24.52 | 342 | 0.00 |
| 10 | 16.18 | 33.51 | 6.71 | 336 | 10 | 16.18 | 33.51 | 6.71 | 24.58 | 336 | 0.03 |
| 24 | - | 33.51 | 6.81 | | 20 | 15.7 | 33.51 | 6.78 | 24.69 | 326 | 0.07 |
| 51 | 13.24 | 33.49 | 6.52 | 278 | 30 | 14.7 | 33.51 | 6.81 | 24.91 | 305 | 0.10 |
| 71 | - | 33.58 | 4.54 | | 50 | 13.5 | 33.49 | 6.56 | 25.14 | 283 | 0.16 |
| 94 | 10.90 | 33.58 | 3.86 | 229 | 75 | 11.2 | 33.58 | 4.35 | 25.66 | 234 | 0.22 |
| 121 | 10.63 | 34.18 | 2.21 | 180 | 100 | 10.82 | 33.80 | 3.59 | 25.89 | 212 | 0.28 |
| 150 | 10.95 | 34.45 | 1.18 | 166 | 150 | 10.95 | 34.45 | 1.18 | 26.38 | 166 | 0.37 |
| 186 | 10.07 | 34.42 | 0.88 | 153 | 200 | 10.07 | 34.44 | 0.80 | 26.52 | 152 | 0.46 |
| 220 | 10.09 | 34.52 | 0.72 | 146 | 250 | 9.93 | 34.54 | 0.70 | 26.62 | 142 | 0.53 |
| 304 | 9.03 | 34.53 | 0.64 | 129 | 300 | 9.13 | 34.53 | 0.64 | 26.75 | 130 | 0.60 |
| 396 | 7.90 | 34.42 | 0.45 | 121 | 400 | 7.86 | 34.42 | 0.44 | 26.86 | 120 | 0.73 |
| 497 | 6.97 | 34.45 | 0.37 | 106 | 500 | (6.91) | (34.45) | (0.37) | (27.02) | (105) | (0.85) |

a) All oxygen values appear to be approximately 15 per cent high.
b) Salinity samples at 500 and 607 meters appear to have been reversed; they are assumed to be listed in correct order.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| BLACK DOUGLAS; April 22, 1952; 0505 GCT; 27°16.5'N, 114°56'W; sounding, 800 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 36°. | | | | | | | | | | | 123.41 K22 |
| 0 | - | 33.53 | 6.89a) | | 0 | 16.1 | 33.53 | 6.89 | 24.62 | 333 | 0.00 |
| 8 | 16.08 | 33.53 | 6.82 | 333 | 10 | (16.00) | 33.53 | 6.80 | (24.64) | (331) | (0.03) |
| 20 | - | 33.57 | 6.71 | | 20 | (15.90) | 33.57 | 6.71 | (24.69) | (326) | (0.07) |
| 45 | 13.54 | 33.48 | 6.22 | 284 | 30 | (14.70) | 33.56 | 6.57 | (24.95) | (302) | (0.10) |
| 63 | - | 33.64 | 4.50 | | 50 | (12.50) | 33.49 | 5.97 | (25.34) | (264) | (0.15) |
| 84 | 10.95 | 33.89 | 3.58 | 207 | 75 | (11.00) | 33.80 | 3.94 | (25.86) | (215) | (0.21) |
| 117 | 11.12 | 34.31 | 1.53 | 179 | 100 | 11.10 | 34.08 | 2.51 | 26.06 | 196 | (0.27) |
| 147 | 10.39 | 34.33 | 1.64 | 165 | 150 | 10.38 | 34.33 | 1.62 | 26.38 | 165 | (0.36) |
| 184 | 10.45 | 34.40 | 1.33 | 161 | 200 | 10.37 | 34.43 | 1.27 | 26.46 | 158 | (0.44) |
| 216 | 10.21 | 34.45 | 1.22 | 153 | 250 | 9.89 | 34.49 | 1.00 | 26.59 | 145 | (0.52) |
| 300 | 9.38 | 34.51 | 0.48 | 136 | 300 | 9.38 | 34.51 | 0.48 | 26.69 | 136 | (0.59) |
| 390 | 8.25 | 34.47 | 0.39 | 122 | 400 | 8.12 | 34.47 | 0.37 | 26.86 | 120 | (0.73) |
| 490 | 7.10 | 34.45 | 0.31 | 107 | 500 | (6.98) | (34.45) | (0.31) | (27.01) | (106) | (0.85) |
| BLACK DOUGLAS; April 22, 1952; 0900 GCT; 27°15'N, 114°55.5'W; sounding, 540 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 28°. | | | | | | | | | | | 123.41 K23 |
| 0 | - | 33.53 | 6.65a) | | 0 | 16.1 | 33.53 | 6.65 | 24.62 | 333 | 0.00 |
| 10 | 16.14 | 33.56 | 6.70 | 332 | 10 | 16.14 | 33.56 | 6.70 | 24.63 | 332 | 0.03 |
| 29 | - | 33.46 | 6.76 | | 20 | 16.1 | 33.52 | 6.74 | 24.61 | 334 | 0.07 |
| 54 | 12.36 | 33.44 | 5.68 | 265 | 30 | 14.7 | 33.46 | 6.76 | 24.87 | 309 | 0.10 |
| 79 | - | 33.71 | 4.39 | | 50 | 12.4 | 33.44 | 6.20 | 25.32 | 266 | 0.16 |
| 102 | 11.06 | 34.02 | 2.69 | 199 | 75 | 11.2 | 33.65 | 4.51 | 25.71 | 229 | 0.22 |
| 145 | 10.84 | 34.33 | 1.50 | 173 | 100 | 11.1 | 33.99 | 2.74 | 25.99 | 202 | 0.27 |
| 186 | 10.67 | 34.44 | 1.03 | 162 | 150 | 10.82 | 34.35 | 1.41 | 26.32 | 171 | 0.37 |
| 229 | 9.90 | 34.47 | 0.90 | 147 | 200 | 10.50 | 34.45 | 0.97 | 26.46 | 158 | 0.45 |
| 274 | 9.50 | 34.50 | 0.59 | 138 | 250 | 9.68 | 34.49 | 0.75 | 26.63 | 142 | 0.53 |
| 364 | 8.36 | 34.47 | 0.28 | 123 | 300 | 9.23 | 34.50 | 0.48 | 26.71 | 134 | 0.60 |
| 469 | 7.09 | 34.41 | 0.29 | 110 | 400 | 7.86 | 34.45 | 0.28 | 26.88 | 118 | 0.73 |
| 574 | 6.22 | 34.43 | 0.44 | 98 | 500 | 6.78 | 34.41 | 0.32 | 27.01 | 106 | 0.85 |
| BLACK DOUGLAS; April 22, 1952; 1313 GCT; 27°14'N, 114°56'W; sounding, 880 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 22°. | | | | | | | | | | | 123.41 K24 |
| 0 | - | 33.53 | 6.70a) | | 0 | 15.9 | 33.53 | 6.70 | 24.66 | 329 | 0.00 |
| 9 | 15.95 | 33.51 | 6.64 | 332 | 10 | 15.9 | 33.49 | 6.66 | 24.63 | 332 | 0.03 |
| 28 | - | 33.33 | 6.96 | | 20 | 15.2 | 33.34 | 6.90 | 24.67 | 328 | 0.07 |
| 55 | 11.78 | 33.46 | 5.27 | 253 | 30 | 14.6 | 33.33 | 6.93 | 24.79 | 316 | 0.10 |
| 83 | - | 33.86 | 3.54 | | 50 | 12.8 | 33.38 | 5.85 | 25.20 | 278 | 0.16 |
| 109 | 10.74 | 34.09 | 2.97 | 189 | 75 | 11.0 | 33.75 | 3.80 | 25.82 | 218 | 0.22 |
| 158 | 10.98 | 34.39 | 1.27 | 171 | 100 | 10.8 | 34.02 | 3.17 | 26.07 | 195 | 0.27 |
| 207 | 10.56 | 34.52 | 0.95 | 154 | 150 | 10.98 | 34.37 | 1.46 | 26.31 | 172 | 0.37 |
| 255 | 9.98 | 34.56 | 0.52 | 142 | 200 | 10.64 | 34.51 | 0.99 | 26.48 | 156 | 0.45 |
| 306 | 9.30 | 34.51 | 0.51 | 135 | 250 | 10.03 | 34.56 | 0.56 | 26.62 | 142 | 0.53 |
| 405 | 7.90 | 34.46 | 0.42 | 118 | 300 | 9.39 | 34.52 | 0.51 | 26.70 | 135 | 0.60 |
| 512 | 6.74 | 34.42 | 0.31 | 105 | 400 | 7.97 | 34.46 | 0.43 | 26.87 | 119 | 0.73 |
| 620 | 5.92 | 34.45 | 0.25 | 92 | 500 | 6.87 | 34.42 | 0.32 | 27.00 | 107 | 0.85 |
| | | | | | 600 | 6.06 | 34.45 | 0.26 | 27.13 | 94 | 0.96 |
| CREST; April 22, 1952; 1812 GCT; 27°08.5'N, 114°53.5'W; sounding, 1500 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 25°. | | | | | | | | | | | 123.41.5 K25 |
| 0 | - | 33.51 | 5.69 | | 0 | 16.3 | 33.51 | 5.69 | 24.55 | 339 | 0.00 |
| 8 | 15.94 | 33.49 | 5.70 | 333 | 10 | 15.9 | 33.49 | 5.71 | 24.63 | 332 | 0.03 |
| 23 | - | 33.48 | 5.80 | | 20 | 15.9 | 33.48 | 5.79 | 24.62 | 333 | 0.07 |
| 50 | 12.36 | 33.48 | 4.49 | 262 | 30 | 14.1 | 33.48 | 5.76 | 25.01 | 295 | 0.10 |
| 72 | - | 33.73 | 3.44 | | 50 | 12.36 | 33.48 | 4.49 | 25.36 | 262 | 0.15 |
| 98 | 11.22 | - | 1.62u | | 75 | 11.3 | 33.82 | | 25.82 | 218 | 0.21 |
| 139 | 10.72 | 34.18 | 1.47 | 182 | 100 | 11.22 | 33.99 | | 25.97 | 204 | 0.27 |
| 182 | 10.49 | 34.43 | 0.86 | 160 | 150 | 11.08 | 34.36 | 1.45 | 26.28 | 175 | 0.36 |
| 231 | 10.29 | 34.51 | 0.49 | 150 | 200 | 10.43 | 34.47 | 0.60 | 26.48 | 156 | 0.45 |
| 273 | 9.69 | 34.52 | 0.52 | 140 | 250 | 10.11 | 34.52 | 0.51 | 26.58 | 147 | 0.53 |
| 370 | 8.20 | 34.52 | 0.52 | 117 | 300 | 9.20 | 34.52 | 0.52 | 26.73 | 132 | 0.60 |
| 470 | 7.21 | 34.40 | 0.31 | 113 | 400 | 7.90 | 34.50 | 0.50 | 26.92 | 115 | 0.73 |
| 575 | 6.20 | 34.40 | 0.24 | 100 | 500 | 6.90 | 34.40 | 0.25 | 26.98 | 108 | 0.85 |



a) All oxygen values appear to be approximately 15 per cent high.

SIO

CCOFI
5204

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **123.41.5 K26** | CREST; April 22, 1952; 2050 GCT; 27°08.5'N, 114°53.5'W; sounding, 800 fm; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | - | 33.48 | 5.73 | | 0 | 16.3 | 33.48 | 5.73 | 24.53 | 341 | 0.00 |
| 8 | 16.09 | 33.49 | 5.85 | 336 | 10 | 16.0 | 33.49 | 5.85 | 24.61 | 334 | 0.03 |
| 23 | - | 33.48 | 5.85 | | 20 | 16.0 | 33.49 | 5.85 | 24.61 | 334 | 0.07 |
| 50 | 12.70 | 33.35 | 5.16 | 278 | 30 | 15.7 | 33.46 | 5.82 | 24.65 | 330 | 0.10 |
| 72 | - | 33.75 | 3.48 | | 50 | 12.70 | 33.35 | 5.16 | 25.20 | 278 | 0.16 |
| 98 | 10.72 | 33.96 | 2.54 | 198 | 75 | 11.1 | 33.76 | 3.34 | 25.81 | 219 | 0.22 |
| 145 | 10.97 | 34.36 | 1.09 | 173 | 100 | 10.73 | 33.98 | 2.49 | 26.05 | 197 | 0.28 |
| 192 | 9.99 | 34.42 | 1.11 | 152 | 150 | 10.96 | 34.38 | 1.09 | 26.32 | 171 | 0.37 |
| 243 | 9.84 | 34.58 | 0.46 | 138 | 200 | 9.97 | 34.44 | 1.09 | 26.54 | 150 | 0.45 |
| 287 | 9.53 | 34.52 | 0.46 | 137 | 250 | 9.80 | 34.58 | 0.46 | 26.68 | 137 | 0.53 |
| 389 | 8.38 | 34.51 | 0.27 | 121 | 300 | 9.38 | 34.52 | 0.46 | 26.70 | 135 | 0.60 |
| 489 | 7.08 | 34.42 | 0.28 | 109 | 400 | 8.23 | 34.51 | 0.27 | 26.88 | 119 | 0.73 |
| 595 | 6.16 | 34.38 | 0.54 | 101 | 500 | 6.98 | 34.41 | 0.29 | 26.98 | 109 | 0.85 |
| | | | | | 600 | (6.12) | (34.38) | (0.54) | (27.07) | (100) | (0.96) |
| **123.41.5 K27** | CREST; April 23, 1952; 0105 GCT; 27°08.5'N, 114°53.5'W; sounding, 430 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 34°. | | | | | | | | | | |
| 0 | - | 33.48 | 5.82 | | 0 | 16.2 | 33.48 | 5.82 | 24.55 | 339 | 0.00 |
| 8 | 16.16 | 33.55 | 5.77 | 333 | 10 | 16.1 | 33.55 | 5.79 | 24.63 | 332 | 0.03 |
| 21 | - | 33.51 | 5.90 | | 20 | 16.1 | 33.51 | 5.90 | 24.60 | 335 | 0.07 |
| 47 | 11.52 | 33.49 | 4.57 | 247 | 30 | 14.7 | 33.50 | 5.79 | 24.90 | 306 | 0.10 |
| 66 | - | 33.68 | 3.87 | | 50 | 11.4 | 33.49 | 4.40 | 25.55 | 244 | 0.15 |
| 90 | 10.82 | 33.87 | 3.25 | 206 | 75 | 10.9 | 33.76 | 3.64 | 25.85 | 216 | 0.21 |
| 122 | 10.94 | 34.22 | 1.80 | 183 | 100 | 10.84 | 33.97 | 2.93 | 26.02 | 199 | 0.26 |
| 156 | 10.78 | 34.47 | 1.02 | 162 | 150 | 10.82 | 34.44 | 1.13 | 26.39 | 164 | 0.36 |
| 193 | 10.26 | 34.58 | 0.73 | 145 | 200 | 10.26 | 34.60 | 0.70 | 26.61 | 143 | 0.44 |
| 230 | 10.27 | 34.65 | 0.44 | 140 | 250 | 10.10 | 34.65 | 0.39 | 26.68 | 137 | 0.51 |
| 315 | 8.96 | 34.63 | 0.31 | 120 | 300 | 9.20 | 34.64 | 0.32 | 26.82 | 123 | 0.58 |
| 407 | 7.94 | 34.58 | 0.27 | 109 | 400 | 8.01 | 34.58 | 0.27 | 26.96 | 110 | 0.70 |
| 506 | 6.72 | 34.49 | 0.27 | 99 | 500 | 6.77 | 34.50 | 0.27 | 27.08 | 99 | 0.81 |
| **123.41.5 K28** | CREST; April 23, 1952; 0500 GCT; 27°08.5'N, 114°53.5'W; sounding, 450 fm; wind, 310°, force 5; weather, clear; sea, rough; wire angle, 40°. | | | | | | | | | | |
| 0 | - | 33.62 | 5.79 | | 0 | 16.2 | 33.62 | 5.79 | 24.66 | 329 | 0.00 |
| 8 | 16.10 | 33.53 | 5.84 | 333 | 10 | 16.1 | 33.53 | 5.83 | 24.62 | 333 | 0.03 |
| 19 | - | 33.53 | 5.75 | | 20 | 16.1 | 33.53 | 5.73 | 24.62 | 333 | 0.07 |
| 43 | 12.91 | 33.35 | 5.47 | 282 | 30 | 15.5 | 33.48 | 5.63 | 24.71 | 324 | 0.10 |
| 60 | - | 33.55 | 4.27 | | 50 | 12.1 | 33.37 | 5.23 | 25.33 | 266 | 0.16 |
| 80 | 11.15 | 33.75 | 3.52 | 221 | 75 | 11.2 | 33.70 | 3.70 | 25.75 | 226 | 0.22 |
| 105 | 10.70 | 34.09 | 2.20 | 188 | 100 | 10.72 | 34.01 | 2.50 | 26.07 | 194 | 0.27 |
| 132 | 11.04 | 34.36 | 1.13 | 174 | 150 | 10.78 | 34.39 | 1.06 | 26.36 | 167 | 0.37 |
| 166 | 10.48 | 34.42 | 1.03 | 160 | 200 | 10.65 | 34.51 | 0.64 | 26.48 | 156 | 0.45 |
| 197 | 10.66 | 34.51 | 0.64 | 157 | 250 | 10.27 | 34.51 | 0.45 | 26.54 | 150 | 0.53 |
| 280 | 9.80 | 34.51 | 0.40 | 142 | 300 | 9.51 | 34.51 | 0.39 | 26.67 | 138 | 0.60 |
| 373 | 8.47 | 34.45 | 0.35 | 126 | 400 | 8.11 | 34.44 | 0.31 | 26.84 | 122 | 0.74 |
| 474 | 7.26 | 34.42 | 0.25 | 112 | 500 | (7.01) | (34.42) | | (26.98) | (108) | (0.86) |
| **123.41.5 K29** | CREST; April 23, 1952; 0901 GCT; 27°08.5'N, 114°53.5'W; sounding, 500 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 30°. | | | | | | | | | | |
| 0 | - | 33.46 | 5.84 | | 0 | 16.0 | 33.46 | 5.84 | 24.58 | 336 | 0.00 |
| 8 | 16.01 | 33.49 | 5.79 | 334 | 10 | 16.0 | 33.49 | 5.79 | 24.61 | 334 | 0.03 |
| 22 | - | 33.49 | 5.79 | | 20 | 15.9 | 33.49 | 5.79 | 24.63 | 332 | 0.07 |
| 49 | 11.98 | 33.28 | 5.00 | 270 | 30 | 15.0 | 33.48 | 5.76 | 24.82 | 314 | 0.10 |
| 69 | - | 33.55 | 4.03 | | 50 | 11.9 | 33.28 | 4.99 | 25.29 | 269 | 0.16 |
| 92 | 10.62 | 33.82 | 3.25 | 207 | 75 | 11.0 | 33.63 | 3.83 | 25.73 | 227 | 0.22 |
| 133 | 11.21 | 34.34 | 1.11 | 178 | 100 | 10.66 | 33.92 | 2.82 | 26.02 | 200 | 0.27 |
| 173 | 10.35 | 34.38 | 0.96 | 161 | 150 | 10.85 | 34.37 | 0.97 | 26.33 | 170 | 0.37 |
| 218 | 10.08 | 34.47 | 0.68 | 150 | 200 | 10.21 | 34.45 | 0.79 | 26.51 | 153 | 0.45 |
| 258 | 9.60 | 34.47 | 0.65 | 142 | 250 | 9.68 | 34.47 | 0.66 | 26.61 | 143 | 0.53 |
| 353 | 8.41 | 34.42 | 0.47 | 128 | 300 | 9.07 | 34.45 | 0.59 | 26.70 | 135 | 0.60 |
| 452 | 7.11 | 34.38 | 0.30 | 113 | 400 | 7.76 | 34.40 | 0.40 | 26.86 | 120 | 0.73 |
| 556 | 6.34 | 34.36 | 0.25 | 104 | 500 | 6.67 | 34.37 | 0.26 | 26.99 | 108 | 0.85 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; April 23, 1952; 1240 GCT; 27°08.5'N, 114°53.5'W; sounding, 370 fm; wind, 330°, force 4; weather, partly cloudy; sea, moderate; wire angle, 30°. | | | | | | | | | | | |
| 0 | - | 33.49 | 5.85 | | 0 | 15.7 | 33.49 | 5.85 | 24.67 | 328 | 0.00 |
| 8 | 15.67 | 33.49 | 5.95 | 327 | 10 | 15.7 | 33.49 | 5.94 | 24.67 | 328 | 0.03 |
| 22 | - | 33.46 | 5.87 | | 20 | 15.7 | 33.47 | 5.89 | 24.66 | 329 | 0.07 |
| 48 | 12.58 | 33.31 | 5.15 | 279 | 30 | 15.0 | 33.41 | 5.75 | 24.77 | 319 | 0.10 |
| 69 | - | 33.44 | 4.35 | | 50 | 12.5 | 33.31 | 5.07 | 25.20 | 277 | 0.16 |
| 93 | 10.83 | 33.75 | 3.20 | 216 | 75 | 11.3 | 33.50 | 4.06 | 25.57 | 242 | 0.22 |
| 135 | 11.22 | 34.36 | 0.96 | 177 | 100 | 10.84 | 33.84 | 2.86 | 25.92 | 209 | 0.28 |
| 175 | 10.72 | 34.49 | 0.57 | 159 | 150 | 11.11 | 34.46 | 0.75 | 26.35 | 168 | 0.38 |
| 222 | 10.07 | 34.49 | 0.47 | 148 | 200 | 10.36 | 34.49 | 0.50 | 26.51 | 153 | 0.46 |
| 262 | 9.71 | 34.47 | 0.45 | 144 | 250 | 9.82 | 34.47 | 0.46 | 26.59 | 146 | 0.53 |
| 358 | 8.38 | 34.43 | 0.35 | 127 | 300 | 9.21 | 34.47 | 0.40 | 26.69 | 136 | 0.61 |
| 454 | 7.39 | 34.38 | 0.32 | 116 | 400 | 7.92 | 34.40 | 0.33 | 26.84 | 122 | 0.74 |
| 556 | 6.54 | 34.38 | 0.28 | 105 | 500 | 6.99 | 34.38 | 0.30 | 26.95 | 111 | 0.87 |

$123^{7}.41^{5}$
K30

SIO

CCOFI 5204

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

77 6.52 5

77 6.55

E. W. SCRIPPS; April 26, 1952; 1609 GCT; 34°50'N, 120°55.5'W; sounding, 170 fm; wind, 320°, force 2; weather, partly cloudy; sea, very rough; wire angle, 03°.[a]

| | | | | |
|---|---|---|---|---|
| 0 | 11.98 | 5.76 | 0 | 11.98 |
| 50 | - | 4.63 | 10 | 11.7 |
| 104 | - | 3.72 | 20 | 11.6 |
| 128 | 9.24 | 2.83 | 30 | 11.4 |
| 153 | 9.02 | 2.67 | 50 | 11.0 |
| | | | 75 | 9.6 |
| | | | 100 | 9.40 |
| | | | 150 | 9.55 |

E. W. SCRIPPS; April 26, 1952; 1817 GCT; 34°44.5'N, 121°06.1'W; sounding, 292 fm; wind, 330°, force 3; weather, cloudy; sea, very rough; wire angle, 07°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.02 | 0 | 12.4 | 6.02 |
| 10 | - | 6.09 | 10 | 11.9 | 6.09 |
| 25 | 11.85 | 6.14 | 20 | 11.9 | 6.13 |
| 50 | - | 5.10 | 30 | 11.8 | 6.12 |
| 75 | - | 3.29 | 50 | 11.2 | 5.10 |
| 99 | - | 3.02 | 75 | 9.3 | 3.29 |
| 153 | 8.04 | 2.55 | 100 | 8.6 | 3.01 |
| 201 | - | 2.04 | 150 | 8.2 | 2.56 |
| 249 | - | 1.63 | 200 | 7.72 | 2.05 |
| 298 | 7.06 | 1.27 | 250 | 7.48 | 1.62 |
| 352 | 6.69 | 0.94 | 300 | 7.04 | 1.25 |
| 402 | 6.34 | 0.77 | 400 | 6.36 | 0.77 |
| 451 | 5.96 | 0.62 | 500 | 5.74 | 0.69 |
| 501 | 5.74 | 0.69 | | | |

77 6.57 5

77 6.60

E. W. SCRIPPS; April 26, 1952; 2019 GCT; 34°39.8'N, 121°16.8'W; sounding, 350 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 08°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.31 | 0 | 12.2 | 6.31 |
| 10 | 11.75 | 6.34 | 10 | 11.75 | 6.34 |
| 25 | - | 5.89 | 20 | 11.5 | 6.15 |
| 49 | - | 3.86 | 30 | 11.4 | 5.20 |
| 74 | - | 3.35 | 50 | 10.3 | 3.86 |
| 98 | 8.78 | 2.99 | 75 | 9.2 | 3.34 |
| 151 | - | 2.60 | 100 | 8.7 | 2.95 |
| 199 | - | 2.29 | 150 | 8.0 | 2.60 |
| 245p | 7.12 | 1.88 | 200 | 7.4 | 2.28 |
| 246 | 7.06 | 2.01 | | | |
| 294p | 6.72 | 1.25 | | | |
| 428p | 5.71 | 0.62 | | | |

E. W. SCRIPPS; April 26, 1952; 2223 GCT; 34°34.5'N, 121°27'W; sounding, 900 fm; wind, 300°, force 3; weather, partly cloudy; sea, very rough; wire angle, 18°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.16 | 0 | 12.7 | 6.16 |
| 10 | 12.00 | 6.21 | 10 | 12.00 | 6.21 |
| 24 | - | 5.47 | 20 | 11.7 | 5.75 |
| 48 | - | 4.46 | 30 | 10.6 | 5.13 |
| 72 | - | 3.86 | 50 | 9.7 | 4.42 |
| 94 | 8.86 | 3.26 | 75 | 9.1 | 3.81 |
| 144 | - | 2.75 | 100 | 8.8 | 3.18 |
| 189 | - | 2.56 | 150 | 8.3 | 2.73 |
| 234 | 7.20 | 2.25 | 200 | 7.6 | 2.50 |
| 292p | 6.74 | 1.34 | | | |
| 416p | 5.77 | 0.91 | | | |
| 570p | 5.30 | 0.44 | | | |

77 6.62 5

78 4.62 5

E. W. SCRIPPS; April 27, 1952; 0018 GCT; 34°29.5'N, 121°37.5'W; sounding, 1900 fm; wind, 310°, force 3; weather, cloudy; sea, very rough; wire angle, 30°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.02 | 0 | 12.8 | 6.02 |
| 8 | 12.61 | 6.09 | 10 | 12.6 | 6.11 |
| 21 | - | 6.12 | 20 | 12.3 | 6.12 |
| 47 | - | 5.84 | 30 | 12.2 | 6.08 |
| 69 | - | 5.17 | 50 | 11.1 | 5.72 |
| 93 | 9.92 | 4.23 | 75 | 10.1 | 4.95 |
| 134 | - | 3.22 | 100 | 9.8 | 4.00 |
| 173 | - | 2.93 | 150 | 9.1 | 3.13 |
| 218 | 8.02 | - | 200 | 8.2 | |
| 293p | 7.37 | 1.44 | | | |
| 410p | 6.00 | 0.92 | | | |
| 567p | 5.54 | 0.38 | | | |

E. W. SCRIPPS; April 27, 1952; 0226 GCT; 34°20'N, 121°30'W; sounding, 1800 fm; wind, 300°, force 3; weather, partly cloudy; sea, very rough; wire angle, 30°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.26 | 0 | 12.7 | 6.26 |
| 8 | 12.59 | 6.27 | 10 | 12.5 | 6.26 |
| 21 | - | 6.23 | 20 | 12.3 | 6.23 |
| 47 | - | 5.79 | 30 | 12.0 | 6.10 |
| 68 | - | 5.53 | 50 | 11.1 | 5.74 |
| 92 | 9.34 | 3.89 | 75 | 11.0 | 5.13 |
| 135 | - | 2.59 | 100 | 9.1 | 3.62 |
| 175 | - | 2.99u | 150 | 8.4 | |
| 221 | 7.59 | 2.36 | 200 | 7.8 | |

a) Eighteen hydrographic stations were occupied by RV E. W. Scripps from 26 to 28 April at approximately 2-hourly intervals to collect data for a special upwelling study. The stations are arranged in the order of time sequence rather than the numerical order of stations.

E. W. SCRIPPS; April 27, 1952; 0448 GCT; 34°26.4'N, 121°21'W; sounding, 1175 fm; wind, 300°, force 3; weather, cloudy; sea, very rough; wire angle, 30°.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | - | 6.37 | 0 | 12.2 | 6.37 |
| 8 | 12.14 | 6.40 | 10 | 12.1 | 6.38 |
| 21 | - | 5.90 | 20 | 11.8 | 6.00 |
| 47 | - | 4.37 | 30 | 11.4 | 5.38 |
| 69 | - | 3.56 | 50 | 10.0 | 4.28 |
| 92 | 9.12 | 3.30 | 75 | 9.4 | 3.50 |
| 133 | - | 2.79 | 100 | 9.0 | 3.21 |
| 174 | - | 2.42 | 150 | 8.3 | 2.63 |
| 222 | 7.13 | 1.96 | 200 | 7.4 | 2.15 |
| 263 | 6.85 | 1.73 | 250 | 6.94 | 1.82 |
| 358 | 6.05 | 1.10 | 300 | 6.52 | 1.49 |
| 455 | 5.60 | 0.61 | 400 | 5.86 | 0.88 |
| 560 | 5.12 | 0.36 | 500 | 5.40 | 0.49 |

E. W. SCRIPPS; April 27, 1952; 0720 GCT; 34°31.5'N, 121°10.2'W; sounding, 600 fm; wind, 310°, force 3; weather, cloudy; sea, very rough; wire angle, 17°. $78^{4}.60$ $78^{4}.57^{5}$

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | - | 6.15 | 0 | 12.7 | 6.15 |
| 9 | 12.44 | 6.13 | 10 | 12.4 | 6.14 |
| 24 | - | 6.21 | 20 | 12.3 | 6.20 |
| 52 | - | 5.21 | 30 | 12.2 | 6.19 |
| 76 | - | 4.19 | 50 | 11.2 | 5.39 |
| 105 | 9.01 | 3.32 | 75 | 9.4 | 4.25 |
| 157 | - | 2.56 | 100 | 9.1 | 3.45 |
| 209 | - | 1.98 | 150 | 8.6 | 2.65 |
| 266 | 7.62 | 1.30 | 200 | 8.2 | 2.09 |
| 313 | 7.13 | 1.25 | 250 | 7.8 | 1.40 |
| 424 | 6.23 | 0.66 | 300 | 7.26 | 1.29 |
| 530 | 5.56 | 0.43 | 400 | 6.41 | 0.78 |
| 639 | 5.08 | 0.38 | 500 | 5.72 | 0.50 |
| | | | 600 | 5.21 | 0.38 |

E. W. SCRIPPS; April 27, 1952; 0935 GCT; 34°36'N, 120°59.5'W; sounding, 350 fm; wind, 300°, force 3; weather, clear; sea, rough; wire angle, 15°.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | - | 6.15 | 0 | 12.3 | 6.15 |
| 10 | 12.22 | 6.12 | 10 | 12.22 | 6.12 |
| 24 | - | 6.09 | 20 | 12.2 | 6.11 |
| 48 | - | 5.84 | 30 | 12.0 | 6.08 |
| 72 | - | 3.99 | 50 | 11.7 | 5.78 |
| 96 | 8.88 | 3.26 | 75 | 10.0 | 3.85 |
| 191 | - | 2.01 | 100 | 8.8 | 3.20 |
| 237 | 7.84 | 1.58 | 150 | 8.6 | 2.44 |
| 278p | 7.72 | 1.66 | 200 | 8.2 | 1.93 |
| 382p | 6.67 | 0.88 | | | |
| 529p | 5.88 | 0.60 | | | |

E. W. SCRIPPS; April 27, 1952; 1131 GCT; 34°40.7'N, 120°49.5'W; sounding, 70 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 03°. $78^{4}.55$ $78^{4}.52^{5}$

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | 11.79 | 5.88 | 0 | 11.79 | 5.88 |
| 10 | 11.80 | 5.82 | 10 | 11.80 | 5.82 |
| 25 | 11.04 | 5.19 | 20 | 11.52 | 5.51 |
| 50 | 9.47 | 3.47 | 30 | 10.80 | 4.75 |
| 75 | 9.02 | 2.63a) | 50 | 9.47 | 3.47 |
| 100 | 8.92 | 2.05a) | 75 | 9.02 | 2.63 |
| | | | 100 | 8.92 | 2.05 |

E. W. SCRIPPS; April 27, 1952; 1301 GCT; 34°32.3'N, 120°44.2'W; sounding, 70 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 07°.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | 11.68 | 5.45 | 0 | 11.68 | 5.45 |
| 10 | 11.70 | 5.42 | 10 | 11.70 | 5.42 |
| 25 | 10.98 | 4.81 | 20 | 11.35 | 5.12 |
| 50 | 10.05 | 3.63 | 30 | 10.73 | 4.41 |
| 75 | 9.65 | 3.37 | 50 | 10.05 | 3.63 |
| 99 | 9.28 | 2.93 | 75 | 9.65 | 3.37 |
| | | | 100 | (9.26) | (2.91) |

E. W. SCRIPPS; April 27, 1952; 1451 GCT; 34°27.4'N, 120°54.1'W; sounding, 400 fm; wind, 270°, force 3; weather, overcast; sea, rough; wire angle, 12°. $79^{2}.52^{5}$ $79^{2}.55$

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | - | 6.03 | 0 | 12.2 | 6.03 |
| 9 | 12.14 | 5.83 | 10 | 12.1 | 5.83 |
| 24 | - | 5.94 | 20 | 12.1 | 5.92 |
| 53 | - | 3.93 | 30 | 12.1 | 5.70 |
| 107 | 8.84 | 3.02 | 50 | 10.4 | 4.00 |
| 159 | - | 2.39 | 75 | 9.5 | 3.58 |
| 211 | - | 2.30 | 100 | 9.4 | 3.17 |
| 268 | 7.64 | 1.41 | 150 | 8.7 | 2.43 |
| 311p | 7.69 | 1.56 | 200 | 8.3 | 2.33 |
| 422p | 6.56 | 0.81 | 250 | 8.0 | 1.60 |
| 580p | 5.64 | 0.30 | | | |

a) Oxygen samples at 75 and 100 meters appear to have been reversed; they are assumed to be listed in correct order.

SIO

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| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

79$^{2.57^5}$

E. W. SCRIPPS; April 27, 1952; 1701 GCT; 34°22.8'N, 121°05'W; sounding, 660 fm; wind, 280°, force 4; weather, overcast; sea, rough, wire angle, 18°.

79$^{2.60}$

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.20 | 0 | 12.5 | 6.20 |
| 9 | 12.38 | 6.16 | 10 | 12.4 | 6.15 |
| 23 | - | 5.90 | 20 | 12.3 | 6.01 |
| 47 | - | 4.87 | 30 | 12.1 | 5.64 |
| 71 | - | 3.60 | 50 | 11.8 | 4.60 |
| 94 | 9.52 | 3.18 | 75 | 9.9 | 3.52 |
| 144 | - | 2.50 | 100 | 9.5 | 3.12 |
| 190 | - | 2.00 | 150 | 8.9 | 2.43 |
| 236 | 7.84 | 1.69 | 200 | 8.3 | 1.90 |
| 271p | 7.47 | 1.64 | | | |
| 384p | 6.56 | 0.71 | | | |
| 528p | 5.82 | 0.38 | | | |

E. W. SCRIPPS; April 27, 1952; 1900 GCT; 34°17.7'N, 121°15.2'W; sounding, 1100 fm; wind, 280°, force 5; weather, overcast; sea, very rough; wire angle, 10°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.29 | 0 | 12.6 | 6.29 |
| 10 | 12.46 | 6.09 | 10 | 12.46 | 6.09 |
| 25 | - | 6.34 | 20 | 12.4 | 6.28 |
| 54 | - | 4.80 | 30 | 12.2 | 6.30 |
| 78 | - | 3.74 | 50 | 11.3 | 5.10 |
| 107 | 8.98 | 3.13 | 75 | 9.9 | 3.85 |
| 159 | - | 2.70 | 100 | 9.1 | 3.22 |
| 211 | - | 2.14 | 150 | 8.7 | 2.79 |
| 246p | 7.31 | 2.03 | 200 | 8.0 | 2.21 |
| 268 | 6.82 | 1.82 | | | |
| 408p | 6.10 | 0.66 | | | |
| 589p | 5.50 | 0.36 | | | |

79$^{2.62^5}$

E. W. SCRIPPS; April 27, 1952; 2115 GCT; 34°12.5'N, 121°25.5'W; sounding, 1600 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 23°.

80.62$^5$

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.29 | 0 | 12.4 | 6.29 |
| 8 | 12.30 | 6.21 | 10 | 12.3 | 6.20 |
| 22 | - | 6.08 | 20 | 12.2 | 6.11 |
| 45 | - | 5.08 | 30 | 12.0 | 5.82 |
| 68 | - | 4.33 | 50 | 10.7 | 4.96 |
| 90 | 9.38 | 3.58 | 75 | 9.7 | 4.05 |
| 133 | - | 2.93 | 100 | 9.3 | 3.40 |
| 167 | - | 2.70 | 150 | 8.6 | 2.82 |
| 200 | 7.64 | 2.41 | 200 | 7.64 | 2.41 |
| 226p | 7.79 | 2.21 | | | |
| 352p | 6.39 | 1.43 | | | |
| 509p | 5.66 | 0.44 | | | |

E. W. SCRIPPS; April 27, 1952; 2319 GCT; 34°03.7'N, 121°19.3'W; sounding, 1700 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 34°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.24 | 0 | 12.7 | 6.24 |
| 8 | 12.49 | 6.26 | 10 | 12.4 | 6.24 |
| 20 | - | 6.15 | 20 | 12.3 | 6.15 |
| 45 | - | 5.89 | 30 | 12.1 | 6.04 |
| 66 | - | 3.98 | 50 | 11.4 | 5.80 |
| 91 | 9.10 | 3.26 | 75 | 9.7 | 3.66 |
| 134 | - | 2.85 | 100 | 8.9 | 3.16 |
| 146p | 8.14 | 2.79 | | | |
| 173 | - | 2.61 | | | |
| 212 | 7.32 | 2.14 | | | |
| 367p | 6.04 | 1.99 | | | |
| 541p | 5.47 | 0.43 | | | |

80.60

E. W. SCRIPPS; April 28, 1952; 0116, 0150 GCT; 34°09'N, 121°09'W; sounding, 1150 fm; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 33°, 23°.

80.52$^5$

| | | | | | |
|---|---|---|---|---|---|
| 0 | - | 6.49 | 0 | 12.4 | 6.49 |
| 8 | 12.34 | 6.44 | 10 | (12.30) | 6.44 |
| 20 | - | 6.48 | 20 | (12.20) | 6.48 |
| 45 | - | 5.19 | 30 | (11.30) | 6.25 |
| 66 | - | 3.91 | 50 | (10.90) | 4.88 |
| 91 | 9.06 | 3.07 | 75 | (9.80) | 3.47 |
| 133 | - | 2.68 | 100 | (9.00) | 2.98 |
| | | | 150 | (8.40) | 2.60 |
| 184 | - | 2.37 | 200 | (8.00) | 2.12 |
| 237 | 7.66 | 1.62 | 250 | (7.60) | 1.51 |
| 283 | 7.35 | 1.28 | 300 | 7.20 | 1.23 |
| 387 | 6.49 | 0.90 | 400 | 6.40 | 0.82 |
| 492 | 5.68 | 0.39 | 500 | 5.60 | 0.38 |
| 601 | 5.05 | 0.34 | 600 | 5.06 | 0.34 |

E. W. SCRIPPS; April 28, 1952; 0645 GCT; 34°23.8'N, 120°37.6'W; sounding, 195 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 13°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 11.57 | 5.26 | 0 | 11.57 | 5.26 |
| 10 | 11.58 | 5.29 | 10 | 11.58 | 5.29 |
| 24 | - | 4.57 | 20 | 11.6 | 4.90 |
| 53 | - | 3.27 | 30 | 10.8 | 4.10 |
| 78 | 8.90 | 2.99 | 50 | 9.0 | 3.31 |
| 107 | 8.90 | 2.46 | 75 | 8.91 | 3.02 |
| 161 | 8.56 | 1.92 | 100 | 8.90 | 2.58 |
| 214 | 8.19 | 1.64 | 150 | 8.64 | 2.02 |
| | | | 200 | 8.29 | 1.71 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | SIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m | CCOFI 5205 |

BLACK DOUGLAS; May 20, 1952; 0014, 0038 GCT; 36°37'N, 125°47'W; sounding, 2440 fm; wind, 340°, force 6; weather, overcast; sea, rough; wire angle, 18°, 12°. 60.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 32.84 | 6.06 | | 0 | 13.7 | 32.84 | 6.06 | 24.60 | 335 | 0.00 |
| 10 | 13.64 | 32.79 | 6.13 | 337 | 10 | 13.64 | 32.79 | 6.13 | 24.58 | 337 | 0.03 |
| 24 | - | 32.83 | 6.11 | | 20 | 13.6 | 32.81 | 6.12 | 24.60 | 335 | 0.07 |
| | | | | | 30 | 12.6 | 32.83 | 6.36 | 24.81 | 315 | 0.10 |
| 29a) | 12.87 | 32.83 | 6.34 | 320 | 50 | 11.8 | 32.83 | 6.49 | 24.96 | 300 | 0.16 |
| 52 | - | 32.83 | 6.51 | | 75 | 11.6 | 32.85 | 6.25 | 25.02 | 295 | 0.24 |
| 80 | 11.50 | 32.87 | 6.16 | 292 | 100 | 9.60 | 32.99 | 5.52 | 25.47 | 252 | 0.30 |
| 130 | 9.02 | 33.46 | 4.06 | 208 | 150 | 8.87 | 33.71 | 3.55 | 26.15 | 187 | 0.42 |
| 181 | 8.61 | 33.89 | 2.67 | 170 | 200 | 8.40 | 33.93 | 2.48 | 26.39 | 164 | 0.51 |
| 229 | 8.10 | 33.97 | 2.25 | 157 | 250 | 7.81 | 34.03 | 2.02 | 26.56 | 148 | 0.59 |
| 270 | 7.60 | 34.08 | 1.80 | 142 | 300 | 7.32 | 34.09 | 1.50 | 26.68 | 137 | 0.66 |
| 371 | 6.72 | 34.09 | 1.07 | 129 | 400 | 6.51 | 34.10 | 0.93 | 26.80 | 126 | 0.80 |
| 474 | 6.04 | 34.18 | 0.70 | 114 | 500 | 5.90 | 34.20 | 0.65 | 26.96 | 111 | 0.92 |
| 581 | 5.44 | 34.25 | 0.49 | 102 | | | | | | | |

BLACK DOUGLAS; May 20, 1952; 1556 GCT; 36°17'N, 126°30'W; sounding, 2500 fm; wind, 320°, force 6; weather, cloudy; sea, rough; wire angle, 08°. 60.100

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 32.81 | 6.21 | | 0 | 13.2 | 32.81 | 6.21 | 24.68 | 327 | 0.00 |
| 10 | 13.14 | 32.81 | 6.23 | 326 | 10 | 13.14 | 32.81 | 6.23 | 24.69 | 326 | 0.03 |
| 25 | - | 32.83 | 6.25 | | 20 | 13.1 | 32.82 | 6.23 | 24.71 | 325 | 0.07 |
| 54 | - | 33.01 | 6.36 | | 30 | 13.1 | 32.85 | 6.27 | 24.73 | 322 | 0.10 |
| 78 | - | 32.99 | 5.99 | | 50 | 12.2 | 33.00 | 6.35 | 25.02 | 295 | 0.16 |
| 106 | 8.60 | 33.17 | 5.14 | 223 | 75 | 11.0 | 32.99 | 6.02 | 25.23 | 275 | 0.23 |
| 156 | 8.84 | 33.73 | 3.75 | 185 | 100 | 8.7 | 33.10 | 5.32 | 25.70 | 230 | 0.29 |
| 206 | 7.96 | 33.95 | 2.77 | 156 | 150 | 8.84 | 33.69 | 3.88 | 26.14 | 188 | 0.40 |
| 306 | 6.87 | 34.04 | 1.96 | 135 | 200 | 8.05 | 33.94 | 2.86 | 26.46 | 158 | 0.49 |
| 410 | 6.08 | 34.11 | 0.99 | 120 | 250 | 7.39 | 34.00 | 2.37 | 26.60 | 145 | 0.57 |
| 509 | 5.53 | 34.23 | 0.54 | 104 | 300 | 6.91 | 34.04 | 2.01 | 26.70 | 135 | 0.64 |
| 609 | 4.96 | 34.23 | 0.48 | 98 | 400 | 6.14 | 34.10 | 1.06 | 26.85 | 121 | 0.77 |
| 808 | 4.38 | 34.42 | 0.38 | 78 | 500 | 5.59 | 34.22 | 0.56 | 27.01 | 106 | 0.89 |
| 1011 | 3.73 | 34.45 | 0.52 | 69 | 600 | 4.99 | 34.23 | 0.48 | 27.09 | 98 | 1.00 |
| 1211 | 3.34 | 34.52 | 0.80 | 60 | 700 | 4.72 | 34.34 | 0.40 | 27.21 | 87 | 1.10 |
| | | | | | 800 | 4.41 | 34.41 | 0.38 | 27.30 | 79 | 1.19 |
| | | | | | 1000 | 3.77 | 34.45 | 0.50 | 27.39 | 69 | 1.35 |

BLACK DOUGLAS; May 9, 1952; 0342 GCT; 37°19'N, 122°36'W; sounding, 48 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°. 63.52

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.71 | 32.50 | - | 323 | 0 | 11.71 | 32.50 | | 24.72 | 323 | 0.00 |
| 10 | 11.52 | 32.57 | - | 314 | 10 | 11.52 | 32.57 | | 24.81 | 314 | 0.03 |
| 20 | 9.76 | 33.31 | 5.42 | 231 | 20 | 9.76 | 33.31 | 5.42 | 25.69 | 231 | 0.06 |
| 30 | - | 33.58 | 3.67 | | 30 | 9.20 | 33.58 | 3.67 | 26.00 | 202 | 0.08 |
| 50 | 8.55 | 33.84 | 2.25 | 173 | 50 | 8.55 | 33.84 | 2.25 | 26.30 | 173 | 0.12 |
| 75 | 8.48 | 33.89 | 2.22 | 168 | 75 | 8.48 | 33.89 | 2.22 | 26.35 | 168 | 0.16 |

BLACK DOUGLAS; May 9, 1952; 0551 GCT; 37°14'N, 122°49.5'W; sounding, 100 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 08°. 63.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.92 | 32.99 | 6.98 | 273 | 0 | 10.92 | 32.99 | 6.98 | 25.25 | 273 | 0.00 |
| 10 | 10.89 | 32.97 | 7.01 | 274 | 10 | 10.89 | 32.97 | 7.01 | 25.24 | 274 | 0.03 |
| 25 | 8.92 | 33.39 | 4.80 | 212 | 20 | 9.09 | 33.14 | 6.00 | 25.67 | 233 | 0.05 |
| 49 | - | 33.55 | 5.15 | | 30 | 8.91 | 33.47 | 4.81 | 25.96 | 206 | 0.07 |
| 74 | 8.96 | 33.58 | 5.00 | 198 | 50 | 8.93 | 33.55 | 5.15 | 26.02 | 200 | 0.12 |
| 99 | 8.61 | 33.89 | 2.74 | 170 | 75 | 8.94 | 33.58 | 5.00 | 26.04 | 198 | 0.17 |
| 123 | 8.38 | 33.96 | 2.52 | 162 | 100 | 8.59 | 33.89 | 2.73 | 26.33 | 170 | 0.21 |
| 153 | 8.14 | 34.04 | 2.25 | 152 | 150 | 8.17 | 34.03 | 2.28 | 26.51 | 153 | 0.29 |

a) The second cast may have pretripped.

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **6365** | BLACK DOUGLAS; May 9, 1952; 1205 GCT; 36°53'N, 123°32'W; sounding, 2000 fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | |
| 0 | 12.47 | 33.08 | 7.09 | 294 | 0 | 12.47 | 33.08 | 7.09 | 25.03 | 294 | 0.00 |
| 10 | 12.46 | 33.12 | 7.06 | 291 | 10 | 12.46 | 33.12 | 7.06 | 25.06 | 291 | 0.03 |
| 24 | - | 33.08 | 6.59 | | 20 | 11.7 | 33.09 | 6.75 | 25.18 | 279 | 0.06 |
| 48 | 9.65 | 33.44 | 4.28 | 219 | 30 | 11.0 | 33.08 | 6.25 | 25.30 | 268 | 0.09 |
| 72 | - | 33.57 | 3.79 | | 50 | 9.5 | 33.48 | 4.22 | 25.87 | 214 | 0.13 |
| 96 | 8.76 | 33.62 | 3.56 | 192 | 75 | 9.0 | 33.58 | 3.75 | 26.03 | 199 | 0.19 |
| 146 | - | 33.96 | 2.48 | | 100 | 8.7 | 33.63 | 3.50 | 26.11 | 191 | 0.23 |
| 190 | 7.87 | 34.05 | 2.19 | 148 | 150 | 8.2 | 33.98 | 2.43 | 26.46 | 157 | 0.32 |
| 236 | 7.46 | 34.11 | 1.72 | 138 | 200 | 7.78 | 34.07 | 2.08 | 26.60 | 145 | 0.40 |
| 280 | 7.00 | 34.13 | 1.57 | 130 | 250 | 7.28 | 34.12 | 1.66 | 26.71 | 134 | 0.47 |
| 378 | 6.33 | 34.18 | 0.86 | 118 | 300 | 6.83 | 34.14 | 1.41 | 26.79 | 127 | 0.54 |
| 472 | 5.86 | 34.23 | 0.58 | 108 | 400 | 6.23 | 34.19 | 0.78 | 26.91 | 116 | 0.67 |
| 576 | 5.26 | 34.29 | 0.36 | 97 | 500 | 5.70 | 34.24 | 0.51 | 27.01 | 106 | 0.78 |
| **6750** | BLACK DOUGLAS; May 10, 1952; 0511 GCT; 36°49'N, 122°04.5'W; sounding, 55 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 04°. | | | | | | | | | | |
| 0 | 10.21 | 33.39 | 5.77 | 232 | 0 | 10.21 | 33.39 | 5.77 | 25.68 | 232 | 0.00 |
| 10 | 10.26 | 33.39 | 5.86 | 233 | 10 | 10.26 | 33.39 | 5.86 | 25.67 | 233 | 0.02 |
| 20 | 10.23 | 33.39 | 5.72 | 232 | 20 | 10.23 | 33.39 | 5.72 | 25.68 | 232 | 0.05 |
| 30 | 9.38 | 33.51 | 4.10 | 210 | 30 | 9.38 | 33.51 | 4.10 | 25.91 | 210 | 0.07 |
| 50 | - | 33.78 | 2.63 | | 50 | 8.92 | 33.78 | 2.63 | 26.20 | 183 | 0.11 |
| 75 | 8.61 | 33.87 | 2.47 | 172 | 75 | 8.61 | 33.87 | 2.47 | 26.32 | 172 | 0.15 |
| **6755** | BLACK DOUGLAS; May 10, 1952; 0115 GCT; 36°39'N, 122°26'W; sounding, 1180 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 26°. | | | | | | | | | | |
| 0 | 12.40 | 33.08 | 6.70 | 292 | 0 | 12.40 | 33.08 | 6.70 | 25.04 | 292 | 0.00 |
| 7 | 12.38 | 33.13 | 6.59 | 288 | 10 | 12.4 | 33.13 | 6.56 | 25.08 | 289 | 0.03 |
| 22 | - | 33.13 | 6.55 | | 20 | 12.2 | 33.13 | 6.55 | 25.12 | 285 | 0.06 |
| 44 | 11.65 | 33.10 | 6.29 | 278 | 30 | 12.1 | 33.12 | 6.51 | 25.13 | 284 | 0.09 |
| 67 | - | 33.46 | 4.14 | | 50 | 10.7 | 33.10 | 6.05 | 25.37 | 261 | 0.14 |
| 89 | 8.90 | 33.64 | 3.29 | 193 | 75 | 9.2 | 33.56 | 3.60 | 25.98 | 203 | 0.20 |
| 134 | 8.29 | 33.84 | 2.91 | 169 | 100 | 8.9 | 33.70 | 3.15 | 26.14 | 189 | 0.25 |
| 169 | - | 33.91 | 2.76 | | 150 | 8.10 | 33.88 | 2.84 | 26.40 | 163 | 0.34 |
| 207 | 7.30 | 34.00 | 2.45 | 144 | 200 | 7.38 | 33.98 | 2.52 | 26.58 | 146 | 0.42 |
| 245 | 6.92 | 34.02 | 2.16 | 137 | 250 | 6.89 | 34.02 | 2.10 | 26.68 | 137 | 0.49 |
| 330 | 6.54 | 34.16 | 0.95 | 122 | 300 | 6.70 | 34.08 | 1.23 | 26.76 | 130 | 0.56 |
| 416 | 6.00 | 34.20 | 0.64 | 112 | 400 | 6.09 | 34.20 | 0.70 | 26.93 | 113 | 0.68 |
| 514 | 5.52 | 34.23 | 0.41 | 104 | 500 | 5.59 | 34.22 | 0.43 | 27.01 | 106 | 0.80 |
| **6765** | BLACK DOUGLAS; May 9, 1952; 1736 GCT; 36°19'N, 123°09'W; sounding, 1850 fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | 11.84 | 32.98 | 6.53 | 290 | 0 | 11.84 | 32.98 | 6.53 | 25.07 | 290 | 0.00 |
| 10 | 11.84 | 32.94 | 6.50 | 293 | 10 | 11.84 | 32.94 | 6.50 | 25.04 | 293 | 0.03 |
| 25 | - | 33.04 | 6.69 | | 20 | 11.80 | 32.98 | 6.64 | 25.08 | 289 | 0.06 |
| 50 | 9.54 | 33.26 | 5.31 | 231 | 30 | 10.60 | 33.09 | 6.67 | 25.38 | 260 | 0.09 |
| 75 | - | 33.42 | 4.53 | | 50 | 9.54 | 33.26 | 5.31 | 25.69 | 231 | 0.14 |
| 99 | 9.10 | 33.64 | 3.99 | 196 | 75 | 9.20 | 33.42 | 4.53 | 25.87 | 214 | 0.19 |
| 149 | 8.51 | 33.86 | 3.15 | 171 | 100 | 9.08 | 33.65 | 3.95 | 26.07 | 195 | 0.24 |
| 194 | 7.83 | 34.03 | 2.28 | 149 | 150 | 8.50 | 33.86 | 3.11 | 26.32 | 171 | 0.33 |
| 239 | 7.30 | 34.07 | 2.13 | 138 | 200 | 7.76 | 34.04 | 2.25 | 26.58 | 147 | 0.42 |
| 284 | 6.76 | 34.07 | 1.69 | 131 | 250 | 7.15 | 34.07 | 2.07 | 26.69 | 136 | 0.49 |
| 382 | 6.05 | 34.18 | 0.86 | 114 | 300 | 6.64 | 34.08 | 1.49 | 26.76 | 129 | 0.56 |
| 476 | 5.28 | 34.20 | 0.58 | 104 | 400 | 5.88 | 34.19 | 0.78 | 26.95 | 111 | 0.68 |
| 579 | 4.90 | 34.31 | 0.34 | 91 | 500 | 5.14 | 34.22 | 0.54 | 27.06 | 101 | 0.79 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| BLACK DOUGLAS; May 18, 1952; 2025 GCT; 36°03'N, 122°02'W; sounding, 750 fm; wind, 320°, force 3; weather, distant fog; sea, moderate; wire angle, 19°. | | | | | | | | | | | 70.55 |
| 0 | - | 33.21 | 6.36 | | 0 | 11.1 | 33.21 | 6.36 | 25.39 | 260 | 0.00 |
| 12 | 10.93 | 33.21 | 6.29 | 257 | 10 | 11.0 | 33.21 | 6.31 | 25.40 | 258 | 0.03 |
| 25 | - | 33.28 | 5.93 | | 20 | 10.9 | 33.25 | 6.02 | 25.45 | 254 | 0.05 |
| 53 | - | 33.33 | 5.96 | | 30 | 10.9 | 33.29 | 5.90 | 25.48 | 251 | 0.08 |
| 77 | - | 33.53 | 3.78 | | 50 | 10.9 | 33.32 | 5.95 | 25.51 | 248 | 0.13 |
| 104 | 8.84 | 33.66 | 3.45 | 191 | 75 | 9.3 | 33.50 | 4.00 | 25.92 | 209 | 0.18 |
| 152 | 8.36 | 33.86 | 2.87 | 169 | 100 | 8.9 | 33.64 | 3.48 | 26.09 | 193 | 0.24 |
| 198 | 8.03 | 34.05 | 1.86 | 150 | 150 | 8.38 | 33.85 | 2.91 | 26.34 | 170 | 0.33 |
| 289 | 7.08 | 34.14 | 1.25 | 130 | 200 | 8.01 | 34.05 | 1.83 | 26.55 | 150 | 0.41 |
| 385 | 6.21 | 34.20 | 0.79 | 115 | 250 | 7.50 | 34.09 | 1.42 | 26.65 | 140 | 0.48 |
| 477 | 5.68 | 34.23 | 0.49 | 106 | 300 | 6.95 | 34.15 | 1.20 | 26.78 | 128 | 0.55 |
| 571 | 5.20 | 34.32 | 0.34 | 94 | 400 | 6.11 | 34.21 | 0.72 | 26.94 | 113 | 0.68 |
| 757 | 4.43 | 34.40 | 0.37 | 80 | 500 | 5.55 | 34.25 | 0.43 | 27.04 | 103 | 0.79 |
| 949 | 3.89 | 34.52 | 0.50 | 65 | 600 | 5.07 | 34.34 | 0.35 | 27.17 | 91 | 0.89 |
| 1141 | 3.54 | 34.52 | 0.66 | 62 | 700 | 4.67 | 34.38 | 0.35 | 27.24 | 84 | 0.99 |
| | | | | | 800 | 4.26 | 34.43 | 0.39 | 27.33 | 76 | 1.08 |
| | | | | | 1000 | 3.79 | 34.53 | 0.54 | 27.46 | 63 | 1.23 |
| BLACK DOUGLAS; May 19, 1952; 0008 GCT; 35°53'N, 122°23'W; sounding, 1680 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 08°. | | | | | | | | | | | 70.60 |
| 0 | - | 33.01 | 6.17 | | 0 | 13.5 | 33.01 | 6.17 | 24.77 | 318 | 0.00 |
| 10 | 13.26 | 33.01 | 6.22 | 314 | 10 | 13.26 | 33.01 | 6.22 | 24.82 | 314 | 0.03 |
| 25 | - | 33.01 | 6.26 | | 20 | 13.2 | 33.01 | 6.25 | 24.83 | 312 | 0.06 |
| 50 | 9.43 | 33.08 | 5.66 | 243 | 30 | 10.2 | 33.01 | 6.23 | 25.39 | 260 | 0.09 |
| 74 | - | 33.42 | 4.02 | | 50 | 9.43 | 33.08 | 5.66 | 25.57 | 243 | 0.14 |
| 97 | 8.96 | 33.66 | 3.43 | 192 | 75 | 9.2 | 33.43 | 4.00 | 25.88 | 213 | 0.20 |
| 147 | 8.16 | 33.87 | 2.80 | 165 | 100 | 8.89 | 33.68 | 3.39 | 26.12 | 190 | 0.25 |
| 192 | 7.62 | 34.02 | 2.22 | 146 | 150 | 8.10 | 33.88 | 2.74 | 26.40 | 163 | 0.34 |
| 238 | 7.14 | 34.05 | 1.96 | 138 | 200 | 7.52 | 34.03 | 2.17 | 26.60 | 144 | 0.42 |
| 283 | 6.84 | 34.13 | 1.56 | 128 | 250 | 7.08 | 34.07 | 1.87 | 26.70 | 135 | 0.49 |
| 381 | 5.90 | 34.13 | 0.99 | 116 | 300 | 6.70 | 34.14 | 1.42 | 26.80 | 125 | 0.56 |
| 476 | 5.34 | 34.20 | 0.63 | 104 | 400 | 5.77 | 34.13 | 0.91 | 26.92 | 115 | 0.68 |
| 580 | 4.92 | 34.27 | 0.40 | 95 | 500 | 5.22 | 34.22 | 0.56 | 27.05 | 102 | 0.79 |
| | | | | | 600 | (4.85) | (34.28) | | (27.14) | (93) | (0.90) |
| BLACK DOUGLAS; May 19, 1952; 0548 GCT; 35°33'N, 123°06'W; sounding, 2050 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 24°. | | | | | | | | | | | 70.70 |
| 0 | - | 33.06 | 6.28 | | 0 | 13.2 | 33.06 | 6.28 | 24.87 | 309 | 0.00 |
| 9 | 12.86 | 33.06 | 6.36 | 302 | 10 | 12.8 | 33.06 | 6.35 | 24.95 | 301 | 0.03 |
| 23 | - | 33.01 | 6.32 | | 20 | 12.7 | 33.03 | 6.32 | 24.95 | 302 | 0.06 |
| 50 | - | 32.86 | 6.37 | | 30 | 11.5 | 32.96 | 6.32 | 25.12 | 285 | 0.09 |
| 73 | - | 33.03 | 6.11 | | 50 | 10.1 | 32.86 | 6.37 | 25.29 | 269 | 0.15 |
| 98 | 8.71 | 33.17 | 5.20 | 225 | 75 | 9.9 | 33.06 | 6.07 | 25.48 | 251 | 0.21 |
| 144 | 8.66 | 33.82 | 2.88 | 176 | 100 | 8.71 | 33.18 | 5.01 | 25.76 | 224 | 0.27 |
| 184 | 8.17 | 33.96 | 2.45 | 159 | 150 | 8.62 | 33.86 | 2.80 | 26.31 | 172 | 0.37 |
| 266 | 7.44 | 34.07 | 1.86 | 140 | 200 | 7.98 | 33.99 | 2.31 | 26.51 | 154 | 0.45 |
| 352 | 6.29 | 34.07 | 1.30 | 125 | 250 | 7.58 | 34.06 | 1.97 | 26.62 | 143 | 0.53 |
| 438 | 5.91 | 34.22 | 0.76 | 110 | 300 | 6.91 | 34.07 | 1.62 | 26.72 | 133 | 0.60 |
| 522 | 5.34 | 34.25 | 0.42 | 101 | 400 | 6.09 | 34.15 | 1.00 | 26.89 | 117 | 0.73 |
| 695 | 4.50 | 34.33 | 0.37 | 86 | 500 | 5.50 | 34.25 | 0.47 | 27.04 | 103 | 0.85 |
| 881 | 3.97 | 34.40 | 0.46 | 75 | 600 | 4.93 | 34.29 | 0.39 | 27.14 | 93 | 0.95 |
| 1063 | 3.57 | 34.49 | 0.67 | 64 | 700 | 4.49 | 34.33 | 0.37 | 27.22 | 85 | 1.05 |
| | | | | | 800 | 4.20 | 34.37 | 0.40 | 27.29 | 80 | 1.14 |
| | | | | | 1000 | 3.67 | 34.45 | 0.58 | 27.40 | 68 | 1.30 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

70.80 BLACK DOUGLAS; May 19, 1952; 1210 GCT; 35°13'N, 123°48'W; sounding, 2180 fm; wind, 320°, force 1; weather, partly cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.01 | 6.02 | | 0 | 14.1 | 33.01 | 6.02 | 24.65 | 330 | 0.00 |
| 10 | 14.02 | 33.03 | 6.02 | 327 | 10 | 14.02 | 33.03 | 6.02 | 24.68 | 327 | 0.03 |
| 25 | - | 33.03 | 6.08 | | 20 | 13.9 | 33.03 | 6.06 | 24.71 | 325 | 0.07 |
| 54 | 12.56 | 32.95 | 6.12 | 305 | 30 | 13.8 | 33.02 | 6.10 | 24.72 | 323 | 0.10 |
| 78 | - | 33.03 | 5.84 | | 50 | 12.7 | 32.95 | 6.12 | 24.89 | 308 | 0.16 |
| 106 | 9.84 | 33.24 | 4.68 | 237 | 75 | 11.7 | 33.01 | 5.90 | 25.12 | 285 | 0.24 |
| 155 | 9.40 | 33.73 | 3.15 | 194 | 100 | 10.0 | 33.16 | 4.91 | 25.54 | 246 | 0.30 |
| 206 | 8.20 | 33.95 | 3.03 | 160 | 150 | 9.48 | 33.70 | 3.19 | 26.04 | 197 | 0.41 |
| 260 | 7.48 | 34.00 | 2.41 | 146 | 200 | 8.30 | 33.93 | 3.05 | 26.41 | 163 | 0.51 |
| 306 | 6.99 | 34.05 | 2.04 | 136 | 250 | 7.59 | 33.99 | 2.49 | 26.56 | 148 | 0.59 |
| 413 | 5.98 | 34.14 | 1.10 | 116 | 300 | 7.03 | 34.04 | 2.11 | 26.68 | 137 | 0.66 |
| 516 | 5.33 | 34.22 | 0.62 | 103 | 400 | 6.09 | 34.13 | 1.18 | 26.88 | 118 | 0.79 |
| 623 | 5.10 | 34.31 | 0.36 | 94 | 500 | 5.40 | 34.21 | 0.67 | 27.02 | 104 | 0.91 |
| | | | | | 600 | 5.12 | 34.29 | 0.41 | 27.12 | 95 | 1.02 |

70.90 BLACK DOUGLAS; May 19, 1952; 1800 GCT; 34°53'N, 124°30'W; sounding, 2420 fm; wind, 320°, force 1; weather, partly cloudy; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.03 | 6.00 | | 0 | 14.5 | 33.03 | 6.00 | 24.58 | 336 | 0.00 |
| 10 | 14.28 | 33.01 | 6.05 | 333 | 10 | 14.28 | 33.01 | 6.05 | 24.61 | 333 | 0.03 |
| 25 | - | 33.01 | 6.03 | | 20 | 14.1 | 33.01 | 6.04 | 24.65 | 330 | 0.07 |
| 50 | - | 32.99 | 6.28 | | 30 | 13.9 | 33.01 | 6.04 | 24.69 | 326 | 0.10 |
| 75 | - | 32.86 | 6.02 | | 50 | 13.0 | 32.99 | 6.28 | 24.86 | 310 | 0.16 |
| 98 | 9.48 | 33.12 | 5.20 | 240 | 75 | 11.3 | 32.86 | 6.02 | 25.08 | 289 | 0.24 |
| 149 | 8.59 | 33.57 | 3.97 | 194 | 100 | 9.40 | 33.17 | 5.12 | 25.64 | 235 | 0.30 |
| 195 | 8.07 | 33.91 | 2.95 | 161 | 150 | 8.58 | 33.58 | 3.91 | 26.09 | 193 | 0.41 |
| 287 | 7.10 | 34.11 | 1.79 | 133 | 200 | 8.01 | 33.93 | 2.88 | 26.45 | 159 | 0.50 |
| 385 | 6.13 | 34.14 | 1.03 | 118 | 250 | 7.46 | 34.06 | 2.20 | 26.64 | 141 | 0.58 |
| 478 | 5.68 | 34.18 | 0.55 | 110 | 300 | 6.97 | 34.12 | 1.63 | 26.75 | 130 | 0.65 |
| 576 | 5.15 | 34.27 | 0.44 | 97 | 400 | 6.02 | 34.14 | 0.93 | 26.89 | 117 | 0.78 |
| 768 | 4.32 | 34.34 | 0.36 | 83 | 500 | 5.53 | 34.20 | 0.50 | 27.00 | 107 | 0.89 |
| 959 | 3.75 | 34.43 | 0.54 | 71 | 600 | 5.03 | 34.28 | 0.44 | 27.12 | 95 | 1.00 |
| 1161 | 3.32 | 34.51 | 0.77 | 61 | 700 | 4.62 | 34.31 | 0.39 | 27.19 | 88 | 1.10 |
| | | | | | 800 | 4.20 | 34.35 | 0.39 | 27.27 | 81 | 1.19 |
| | | | | | 1000 | 3.66 | 34.45 | 0.59 | 27.41 | 68 | 1.36 |

70.100 BLACK DOUGLAS; May 19, 1952; 2306 GCT; 34°33'N, 125°12'W; sounding, 2460 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 32.94 | 5.99 | | 0 | 15.1 | 32.94 | 5.99 | 24.38 | 355 | 0.00 |
| 9 | 14.19 | 32.94 | 6.10 | 337 | 10 | 14.2 | 32.94 | 6.10 | 24.58 | 337 | 0.03 |
| 23 | - | 32.94 | 6.09 | | 20 | 14.1 | 32.94 | 6.09 | 24.60 | 335 | 0.07 |
| 45 | 13.05 | 32.99 | 6.18 | 311 | 30 | 13.4 | 32.95 | 6.11 | 24.75 | 321 | 0.10 |
| 68 | - | 32.95 | 6.17 | | 50 | 12.8 | 32.99 | 6.18 | 24.90 | 306 | 0.16 |
| 90 | 10.94 | 33.03 | 5.70 | 271 | 75 | 11.7 | 32.96 | 6.10 | 25.08 | 289 | 0.24 |
| 135 | 8.91 | 33.40 | 4.30 | 211 | 100 | 10.43 | 33.12 | 5.39 | 25.43 | 255 | 0.31 |
| 171 | 8.07 | 33.78 | 3.31 | 171 | 150 | 8.46 | 33.56 | 3.78 | 26.10 | 192 | 0.42 |
| 207 | 7.79 | 33.91 | 3.47 | 157 | 200 | 7.80 | 33.89 | 3.47 | 26.45 | 159 | 0.51 |
| 246 | 7.54 | 34.02 | 2.41 | 145 | 250 | 7.48 | 34.02 | 2.32 | 26.60 | 144 | 0.59 |
| 332 | 6.24 | 34.00 | 1.82 | 130 | 300 | 6.66 | 34.01 | 2.00 | 26.71 | 134 | 0.66 |
| 422 | 5.98 | 34.14 | 0.84 | 116 | 400 | 6.05 | 34.10 | 1.02 | 26.86 | 120 | 0.79 |
| 521 | 5.32 | 34.20 | 0.58 | 104 | 500 | 5.43 | 34.19 | 0.61 | 27.00 | 106 | 0.91 |

73.50 BLACK DOUGLAS; May 18, 1952; 1255 GCT; 35°37'N, 121°16.5'W; sounding, 50 fm; wind, calm; weather, fog; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.98 | 33.79 | 4.71 | 199 | 0 | 9.98 | 33.79 | 4.71 | 26.03 | 199 | 0.00 |
| 10 | 9.34 | 33.75 | 3.74 | 191 | 10 | 9.34 | 33.75 | 3.74 | 26.11 | 191 | 0.02 |
| 20 | 8.94 | 33.86 | 3.12 | 177 | 20 | 8.94 | 33.86 | 3.12 | 26.26 | 177 | 0.04 |
| 30 | 8.78 | 33.86 | 2.99 | 175 | 30 | 8.78 | 33.86 | 2.99 | 26.28 | 175 | 0.06 |
| 50 | 8.73 | 33.91 | 2.68 | 170 | 50 | 8.73 | 33.91 | 2.68 | 26.33 | 170 | 0.09 |
| 75 | 8.64 | 33.93 | 2.56 | 168 | 75 | 8.64 | 33.93 | 2.56 | 26.36 | 168 | 0.13 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BLACK DOUGLAS; May 18, 1952; 0628 GCT; 35°18'N, 121°58.5'W; sounding, 1360 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 28°. 73.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.10 | 6.15 | | 0 | 13.3 | 33.10 | 6.15 | 24.88 | 308 | 0.00 |
| 8 | 13.32 | 33.08 | 6.14 | 310 | 10 | 13.3 | 33.08 | 6.15 | 24.87 | 309 | 0.03 |
| 22 | - | 33.10 | 6.19 | | 20 | 13.3 | 33.10 | 6.19 | 24.88 | 308 | 0.06 |
| 48 | 13.04 | 33.08 | 6.18 | 304 | 30 | 13.3 | 33.10 | 6.19 | 24.88 | 308 | 0.09 |
| 70 | - | 33.12 | 5.40 | | 50 | 12.9 | 33.08 | 6.16 | 24.95 | 302 | 0.15 |
| 94 | 9.20 | 33.42 | 4.16 | 214 | 75 | 9.9 | 33.15 | 5.05 | 25.55 | 245 | 0.22 |
| 137 | 8.92 | 33.84 | 2.88 | 178 | 100 | 9.14 | 33.52 | 3.84 | 25.96 | 205 | 0.28 |
| 177 | 8.34 | 33.95 | 2.69 | 162 | 150 | 8.75 | 33.90 | 2.79 | 26.32 | 171 | 0.37 |
| 222 | 7.76 | 34.02 | 2.37 | 148 | 200 | 7.94 | 33.99 | 2.54 | 26.51 | 153 | 0.46 |
| 260 | 7.66 | 34.11 | 1.92 | 140 | 250 | 7.66 | 34.10 | 2.02 | 26.64 | 141 | 0.53 |
| 356 | 6.76 | 34.14 | 1.16 | 126 | 300 | 7.34 | 34.12 | 1.52 | 26.70 | 135 | 0.60 |
| 453 | 5.93 | 34.20 | 0.71 | 111 | 400 | 6.32 | 34.17 | 0.92 | 26.88 | 118 | 0.74 |
| 555 | 5.47 | 34.27 | 0.41 | 101 | 500 | 5.64 | 34.23 | 0.55 | 27.01 | 106 | 0.85 |

BLACK DOUGLAS; May 17, 1952; 1333 GCT; 35°04.5'N, 120°52'W; sounding, 90 fm; wind, calm; weather, light fog; sea, rough; wire angle, 05°. 77.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.11 | 33.39 | 6.26 | 264 | 0 | 12.11 | 33.39 | 6.26 | 25.34 | 264 | 0.00 |
| 10 | 12.08 | 33.39 | 6.27 | 264 | 10 | 12.08 | 33.39 | 6.27 | 25.35 | 264 | 0.03 |
| 20 | 10.04 | 33.44 | 4.66 | 225 | 20 | 10.04 | 33.44 | 4.66 | 25.75 | 225 | 0.05 |
| 30 | 9.86 | 33.51 | 4.35 | 217 | 30 | 9.86 | 33.51 | 4.35 | 25.83 | 217 | 0.07 |
| 50 | 9.54 | 33.55 | 4.09 | 209 | 50 | 9.54 | 33.55 | 4.09 | 25.92 | 209 | 0.12 |
| 75 | 9.17 | 33.66 | 3.56 | 196 | 75 | 9.17 | 33.66 | 3.56 | 26.06 | 196 | 0.17 |
| 100 | 8.97 | 33.78 | 3.12 | 184 | 100 | 8.97 | 33.78 | 3.12 | 26.19 | 184 | 0.21 |
| 124 | 8.67 | 33.89 | 2.43 | 171 | | | | | | | |

BLACK DOUGLAS; May 17, 1952; 1701 GCT; 34°54'N, 121°15.5'W; sounding, 250 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 20°. 77.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.31 | 6.35 | | 0 | 12.2 | 33.31 | 6.35 | 25.26 | 272 | 0.00 |
| 11 | 12.21 | 33.31 | 6.36 | 272 | 10 | 12.21 | 33.31 | 6.35 | 25.26 | 272 | 0.03 |
| 25 | 12.10 | 33.33 | 6.27 | 269 | 20 | 12.14 | 33.32 | 6.31 | 25.28 | 270 | 0.05 |
| 47 | 11.50 | 33.35 | 6.00 | 257 | 30 | 12.00 | 33.33 | 6.22 | 25.31 | 267 | 0.08 |
| 68 | 10.02 | 33.37 | 4.64 | 230 | 50 | 11.36 | 33.35 | 5.90 | 25.45 | 254 | 0.13 |
| 88 | 9.14 | 33.57 | 3.77 | 202 | 75 | 9.57 | 33.40 | 4.25 | 25.80 | 221 | 0.19 |
| 133 | 8.46 | 33.87 | 2.79 | 169 | 100 | 8.91 | 33.70 | 3.41 | 26.14 | 189 | 0.24 |
| 176 | 7.91 | 33.98 | 2.52 | 153 | 150 | 8.25 | 33.92 | 2.65 | 26.41 | 163 | 0.33 |
| 220 | 7.26 | 34.05 | 2.12 | 139 | 200 | 7.48 | 34.02 | 2.32 | 26.60 | 144 | 0.41 |
| 265 | 7.17 | 34.13 | 1.50 | 132 | 250 | 7.19 | 34.11 | 1.70 | 26.71 | 134 | 0.48 |
| 317 | 6.82 | 34.17 | 1.08 | 125 | 300 | 6.94 | 34.16 | 1.18 | 26.79 | 127 | 0.55 |
| 365 | 6.46 | 34.23 | 0.82 | 116 | | | | | | | |

BLACK DOUGLAS; May 17, 1952; 2305 GCT; 34°34'N, 121°55'W; sounding, 2060 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 22°. 77.65

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.08 | 6.26 | | 0 | 14.0 | 33.08 | 6.26 | 24.73 | 323 | 0.00 |
| 10 | 12.96 | 33.10 | 6.25 | 301 | 10 | 12.96 | 33.10 | 6.25 | 24.95 | 301 | 0.03 |
| 24 | - | 33.08 | 6.21 | | 20 | 12.8 | 33.08 | 6.23 | 24.97 | 300 | 0.06 |
| 52 | 12.24 | 33.12 | 6.17 | 287 | 30 | 12.5 | 33.08 | 6.20 | 25.03 | 294 | 0.09 |
| 74 | - | 33.13 | 5.56 | | 50 | 12.2 | 33.12 | 6.17 | 25.11 | 286 | 0.15 |
| 101 | 9.60 | 33.46 | 4.01 | 217 | 75 | 10.7 | 33.13 | 5.50 | 25.39 | 259 | 0.22 |
| 144 | 8.72 | 33.82 | 2.97 | 177 | 100 | 9.6 | 33.42 | 4.08 | 25.81 | 220 | 0.28 |
| 187 | 7.99 | 33.98 | 2.57 | 155 | 150 | 8.61 | 33.86 | 2.88 | 26.31 | 172 | 0.38 |
| 235 | 7.49 | 34.02 | 2.23 | 145 | 200 | 7.80 | 34.00 | 2.49 | 26.54 | 150 | 0.46 |
| 278 | 7.05 | 34.05 | 1.85 | 137 | 250 | 7.35 | 34.03 | 2.10 | 26.63 | 142 | 0.53 |
| 374 | 5.92 | 34.11 | 1.10 | 118 | 300 | 6.77 | 34.07 | 1.64 | 26.74 | 131 | 0.60 |
| 474 | 5.41 | 34.20 | 0.66 | 105 | 400 | 5.78 | 34.13 | 0.97 | 26.91 | 115 | 0.73 |
| 578 | 5.06 | 34.27 | 0.37 | 96 | 500 | 5.31 | 34.22 | 0.58 | 27.04 | 103 | 0.85 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **80.51** | BLACK DOUGLAS; May 16, 1952; 0308 GCT; 34°26.5'N, 120°32.5'W; sounding, 67 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 10.15 | 33.78 | 4.18 | 202 | 0 | 10.15 | 33.78 | 4.18 | 25.99 | 202 | 0.00 |
| 10 | 10.16 | 33.77 | 4.19 | 203 | 10 | 10.16 | 33.77 | 4.19 | 25.99 | 203 | 0.02 |
| 20 | 10.14 | 33.78 | 4.22 | 202 | 20 | 10.14 | 33.78 | 4.22 | 26.00 | 202 | 0.04 |
| 29 | 10.08 | 33.80 | 4.12 | 199 | 30 | 10.06 | 33.80 | 4.11 | 26.03 | 199 | 0.06 |
| 49 | 9.82 | 33.80 | 3.76 | 195 | 50 | 9.78 | 33.80 | 3.71 | 26.07 | 195 | 0.10 |
| 73 | 9.06 | 33.95 | 2.47 | 172 | 75 | 9.05 | 33.96 | 2.45 | 26.32 | 171 | 0.15 |
| 98 | 8.97 | 33.98 | 2.25 | 169 | 100 | (8.95) | (33.98) | (2.24) | (26.35) | (168) | (0.19) |
| **80.55** | BLACK DOUGLAS; May 16, 1952; 0026 GCT; 34°19'N, 120°48'W; sounding, 420 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 05°. | | | | | | | | | | |
| 0 | - | 33.69 | 5.78 | | 0 | 11.2 | 33.69 | 5.78 | 25.74 | 226 | 0.00 |
| 10 | 11.08 | 33.68 | 5.80 | 225 | 10 | 11.08 | 33.68 | 5.80 | 25.75 | 225 | 0.02 |
| 25 | - | 33.69 | 5.61 | | 20 | 11.0 | 33.68 | 5.70 | 25.77 | 224 | 0.05 |
| 50 | 9.66 | 33.73 | 3.60 | 198 | 30 | 11.0 | 33.69 | 5.05 | 25.78 | 223 | 0.07 |
| 75 | - | 33.82 | 2.84 | | 50 | 9.66 | 33.73 | 3.60 | 26.04 | 198 | 0.11 |
| 98 | 8.84 | 33.95 | 2.44 | 169 | 75 | 9.0 | 33.82 | 2.84 | 26.22 | 181 | 0.16 |
| 148 | - | 34.04 | 2.18 | | 100 | (8.83) | 33.96 | 2.41 | (26.35) | (168) | (0.20) |
| 197 | - | 34.11 | 1.98 | | 150 | (8.25) | 34.05 | 2.16 | (26.51) | (153) | (0.28) |
| 242 | 7.45 | 34.13 | 1.60 | 136 | 200 | (7.77) | 34.11 | 1.93 | (26.63) | (142) | (0.36) |
| 293 | 7.40 | 34.20 | 1.19 | 130 | 250 | 7.42 | 34.14 | 1.53 | 26.70 | 135 | (0.43) |
| 390 | 6.47 | 34.20 | 0.90 | 118 | 300 | 7.38 | 34.20 | 1.13 | 26.76 | 130 | (0.50) |
| 486 | 5.97 | 34.25 | 0.54 | 108 | 400 | 6.42 | 34.20 | 0.85 | 26.89 | 117 | (0.63) |
| 590 | 5.38 | 34.30 | 0.36 | 97 | 500 | 5.90 | 34.26 | 0.50 | 27.00 | 106 | (0.74) |
| | | | | | 600 | (5.32) | (34.30) | (0.36) | (27.10) | (97) | (0.85) |
| **80.60** | BLACK DOUGLAS; May 15, 1952; 1640 GCT; 34°09'N, 121°09'W; sounding, 1200 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | |
| 0 | - | 33.82 | 6.29 | | 0 | 11.3 | 33.82 | 6.29 | 25.82 | 218 | 0.00 |
| 10 | 11.22 | 33.84 | 6.38 | 216 | 10 | 11.22 | 33.84 | 6.38 | 25.85 | 216 | 0.02 |
| 25 | - | 33.68 | 6.24 | | 20 | 11.2 | 33.84 | 6.31 | 25.86 | 215 | 0.04 |
| 49 | - | 33.71 | 5.90 | | 30 | 11.0 | 33.69 | 6.18 | 25.78 | 223 | 0.07 |
| 73 | - | 33.78 | 3.81 | | 50 | 10.2 | 33.71 | 5.89 | 25.93 | 208 | 0.11 |
| 97 | 9.22 | 33.91 | 2.98 | 178 | 75 | 9.5 | 33.78 | 3.55 | 26.10 | 192 | 0.16 |
| 148 | 8.74 | 34.14 | 2.43 | 153 | 100 | 9.19 | 33.92 | 2.91 | 26.26 | 177 | 0.21 |
| 191 | 8.48 | 34.16 | 2.02 | 148 | 150 | 8.72 | 34.14 | 2.41 | 26.51 | 153 | 0.29 |
| 281 | 7.16 | 34.14 | 1.52 | 131 | 200 | 8.40 | 34.16 | 1.97 | 26.57 | 147 | 0.37 |
| 375 | 6.66 | 34.14 | 0.82 | 125 | 250 | 7.77 | 34.15 | 1.70 | 26.66 | 139 | 0.44 |
| 465 | 5.95 | 34.25 | 0.48 | 108 | 300 | 7.03 | 34.14 | 1.39 | 26.76 | 130 | 0.51 |
| 561 | 5.48 | 34.31 | 0.39 | 98 | 400 | 6.43 | 34.16 | 0.67 | 26.86 | 120 | 0.64 |
| 750 | 4.68 | 34.42 | 0.37 | 81 | 500 | 5.76 | 34.28 | 0.43 | 27.04 | 103 | 0.76 |
| 939 | 3.97 | 34.46 | 0.53 | 70 | 600 | 5.30 | 34.33 | 0.37 | 27.13 | 94 | 0.86 |
| 1140 | 3.42 | 34.52 | 0.78 | 61 | 700 | 4.90 | 34.40 | 0.37 | 27.23 | 85 | 0.96 |
| | | | | | 800 | 4.51 | 34.43 | 0.39 | 27.30 | 78 | 1.05 |
| | | | | | 1000 | 3.75 | 34.47 | 0.61 | 27.41 | 68 | 1.21 |
| **80.70** | BLACK DOUGLAS; May 15, 1952; 0144 GCT; 33°49'N, 121°51'W; sounding, 2020 fm; wind, 320°, force 7; weather, partly cloudy; sea, high; wire angle, 13°. | | | | | | | | | | |
| 0 | - | 33.04 | 6.08 | | 0 | 14.0 | 33.04 | 6.08 | 24.69 | 326 | 0.00 |
| 9 | 13.82 | 33.10 | 6.10 | 318 | 10 | 13.8 | 33.10 | 6.10 | 24.78 | 317 | 0.03 |
| 24 | - | 33.08 | 6.14 | | 20 | 13.7 | 33.09 | 6.12 | 24.79 | 316 | 0.06 |
| 53 | - | 33.01 | 6.21 | | 30 | 13.6 | 33.06 | 6.17 | 24.79 | 316 | 0.10 |
| 78 | - | 33.01 | 5.75 | | 50 | 12.7 | 33.01 | 6.20 | 24.93 | 303 | 0.16 |
| 106 | 9.24 | 33.21 | 4.86 | 230 | 75 | 11.1 | 33.01 | 5.80 | 25.23 | 275 | 0.23 |
| 156 | 8.64 | 33.80 | 3.57 | 177 | 100 | 9.5 | 33.14 | 5.01 | 25.60 | 239 | 0.29 |
| 206 | 8.27 | 34.12 | 2.71 | 148 | 150 | 8.68 | 33.75 | 3.69 | 26.21 | 182 | 0.40 |
| 260 | 7.65 | 34.29 | 2.17 | 127 | 200 | 8.32 | 34.10 | 2.78 | 26.54 | 150 | 0.49 |
| 305 | 7.41 | 34.49u | 1.53 | | 250 | 7.72 | 34.26 | 2.24 | 26.76 | 130 | 0.56 |
| 411 | 6.47 | 34.38 | 0.90 | 104 | 300 | 7.44 | 34.35 | 1.58 | 26.87 | 119 | 0.62 |
| 515 | 5.79 | 34.40 | 0.48 | 95 | 400 | 6.55 | 34.38 | 0.95 | 27.01 | 105 | 0.74 |
| 623 | 5.28 | 34.42 | 0.32 | 87 | 500 | 5.89 | 34.40 | 0.52 | 27.11 | 96 | 0.85 |
| | | | | | 600 | 5.38 | 34.42 | 0.32 | 27.19 | 88 | 0.95 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

BLACK DOUGLAS; May 14, 1952; 0808 GCT; 33°29'N, 122°32'W; sounding, 2260 fm; wind, 320°, force 6; weather, cloudy; sea, very rough; wire angle, 37°. 80.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.12 | 6.02 | | 0 | 14.3 | 33.12 | 6.02 | 24.69 | 326 | 0.00 |
| 8 | 14.28 | 33.08 | 6.08 | 328 | 10 | 14.3 | 33.08 | 6.08 | 24.66 | 329 | 0.03 |
| 24 | - | 33.03 | 6.06 | | 20 | 14.2 | 33.04 | 6.07 | 24.65 | 330 | 0.07 |
| 48 | - | 32.92 | 6.24 | | 30 | 14.1 | 33.01 | 6.07 | 24.65 | 330 | 0.10 |
| 72 | - | 32.94 | 6.21 | | 50 | 13.1 | 32.92 | 6.24 | 24.78 | 317 | 0.16 |
| 94 | 10.72 | 33.10 | 5.05 | 262 | 75 | 11.6 | 32.95 | 6.15 | 25.09 | 288 | 0.24 |
| 137 | 9.55 | 33.82 | 2.92 | 190 | 100 | 10.50 | 33.17 | 4.70 | 25.46 | 253 | 0.31 |
| 181 | 9.03 | 34.00 | 2.45 | 168 | 150 | 9.39 | 33.92 | 2.76 | 26.23 | 180 | 0.42 |
| 271 | 8.22 | 34.13 | 1.90 | 147 | 200 | 8.83 | 34.03 | 2.32 | 26.41 | 163 | 0.50 |
| 356 | 7.54 | 34.23 | 1.25 | 130 | 250 | 8.40 | 34.10 | 2.05 | 26.53 | 151 | 0.59 |
| 444 | 6.78 | 34.23 | 0.96 | 120 | 300 | 8.01 | 34.19 | 1.64 | 26.66 | 139 | 0.66 |
| 529 | 6.10 | 34.31 | 0.54 | 105 | 400 | 7.15 | 34.23 | 1.09 | 26.81 | 124 | 0.80 |
| 705 | 4.98 | 34.38 | 0.30 | 87 | 500 | 6.32 | 34.28 | 0.65 | 26.96 | 110 | 0.92 |
| 900 | 4.24 | 34.43 | 0.44 | 75 | 600 | 5.58 | 34.34 | 0.43 | 27.11 | 97 | 1.03 |
| 1099 | 3.69 | 34.52 | 0.64 | 63 | 700 | 5.00 | 34.38 | 0.30 | 27.21 | 87 | 1.13 |
| | | | | | 800 | 4.61 | 34.40 | 0.34 | 27.27 | 81 | 1.22 |
| | | | | | 1000 | 3.90 | 34.48 | 0.54 | 27.40 | 68 | 1.39 |

BLACK DOUGLAS; May 14, 1952; 0105 GCT; 33°09'N, 123°13'W; sounding, 2280 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 06°. 80.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.17 | 6.05 | | 0 | 15.4 | 33.17 | 6.05 | 24.50 | 345 | 0.00 |
| 10 | 15.12 | 33.17 | 5.97 | 339 | 10 | 15.12 | 33.17 | 5.97 | 24.56 | 339 | 0.03 |
| 25 | - | 33.22 | 6.00 | | 20 | 14.9 | 33.20 | 5.98 | 24.63 | 332 | 0.07 |
| 50 | - | 33.21 | 6.00 | | 30 | 14.0 | 33.22 | 6.00 | 24.83 | 313 | 0.10 |
| 74 | - | 33.26 | 5.43 | | 50 | 13.7 | 33.21 | 6.00 | 24.89 | 307 | 0.16 |
| 98 | 9.77 | 33.57 | 4.17 | 212 | 75 | 11.3 | 33.26 | 5.42 | 25.39 | 260 | 0.23 |
| 149 | 8.90 | 33.82 | 3.31 | 180 | 100 | 9.69 | 33.59 | 4.01 | 25.92 | 209 | 0.29 |
| 194 | 8.25 | - | 2.68 | | 150 | 8.88 | 33.82 | 3.29 | 26.23 | 179 | 0.39 |
| 239 | 7.68 | 34.05 | 2.52 | 145 | 200 | 8.16 | 33.97 | 2.66 | 26.46 | 158 | 0.48 |
| 285 | 7.26 | 34.11 | 1.99 | 135 | 250 | 7.58 | 34.06 | 2.43 | 26.62 | 143 | 0.55 |
| 383 | 6.19 | 34.18 | 1.10 | 116 | 300 | 7.10 | 34.12 | 1.82 | 26.73 | 132 | 0.62 |
| 477 | 5.59 | 34.25 | 0.63 | 104 | 400 | 6.06 | 34.19 | 0.98 | 26.93 | 114 | 0.75 |
| 581 | 5.28 | 34.33 | 0.41 | 94 | 500 | 5.50 | 34.27 | 0.56 | 27.06 | 101 | 0.87 |
| | | | | | 600 | (5.24) | (34.33) | | (27.14) | (94) | (0.97) |

BLACK DOUGLAS; May 13, 1952; 1917 GCT; 32°49'N, 123°54'W; sounding, 2420 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 12°. 80.100

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 33.21 | 5.90 | | 0 | 15.7 | 33.21 | 5.90 | 24.46 | 348 | 0.00 |
| 10 | 15.48 | 33.25 | 5.90 | 341 | 10 | 15.48 | 33.25 | 5.90 | 24.54 | 341 | 0.03 |
| 25 | - | 33.24 | 5.93 | | 20 | 14.8 | 33.24 | 5.91 | 24.68 | 327 | 0.07 |
| 49 | - | 33.24 | 6.21 | | 30 | 14.2 | 33.23 | 5.97 | 24.80 | 316 | 0.10 |
| 73 | - | 33.44 | 4.76 | | 50 | 13.3 | 33.25 | 6.21 | 25.00 | 297 | 0.16 |
| 96 | 9.75 | 33.57 | 3.87 | 211 | 75 | 10.7 | 33.46 | 4.60 | 25.65 | 235 | 0.23 |
| 146 | 8.79 | 33.84 | 3.09 | 176 | 100 | 9.59 | 33.58 | 3.73 | 25.93 | 208 | 0.28 |
| 190 | 8.36 | 34.07 | 2.47 | 153 | 150 | 8.73 | 33.87 | 3.03 | 26.30 | 173 | 0.38 |
| 277 | 7.50 | 34.18 | 1.72 | 133 | 200 | 8.27 | 34.10 | 2.34 | 26.55 | 150 | 0.46 |
| 368 | 6.50 | 34.18 | 1.21 | 120 | 250 | 7.79 | 34.17 | 1.90 | 26.67 | 138 | 0.54 |
| 455 | 5.78 | 34.25 | 0.69 | 106 | 300 | 7.21 | 34.18 | 1.58 | 26.77 | 129 | 0.61 |
| 546 | 5.43 | 34.33 | 0.40 | 96 | 400 | 6.20 | 34.19 | 1.02 | 26.91 | 115 | 0.73 |
| 724 | 4.59 | 34.52 | 0.32 | 72 | 500 | 5.55 | 34.28 | 0.51 | 27.06 | 101 | 0.85 |
| 898 | 3.98 | 34.52 | 0.48 | 66 | 600 | 5.19 | 34.41 | 0.32 | 27.21 | 87 | 0.95 |
| 1094 | 3.62 | 34.54 | 0.67 | 61 | 700 | 4.70 | 34.51 | 0.32 | 27.34 | 74 | 1.03 |
| | | | | | 800 | 4.26 | 34.52 | 0.38 | 27.40 | 69 | 1.11 |
| | | | | | 1000 | 3.76 | 34.53 | 0.59 | 27.46 | 63 | 1.26 |

SIO

CCOFI
5205

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 83.43 | BLACK DOUGLAS; May 12, 1952; 0107 GCT; 34°08'N, 119°34'W; sounding, 130 fm; wind, 270[b], force 4; weather, clear; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | - | 33.58 | 6.82 | | 0 | 12.8 | 33.58 | 6.82 | 25.35 | 263 | 0.00 |
| 9 | 12.53 | 33.58 | 6.80 | 258 | 10 | 12.25 | 33.58 | 6.80 | 25.46 | 253 | 0.03 |
| 24 | 10.47 | 33.68 | 4.48 | 215 | 20 | 10.85 | 33.66 | 5.75 | 25.78 | 222 | 0.05 |
| 48 | 10.04 | 33.69 | 3.82 | 207 | 30 | 10.19 | 33.68 | 4.25 | 25.91 | 210 | 0.07 |
| 71 | 9.07 | 33.86 | 2.52 | 179 | 50 | 9.99 | 33.69 | 3.74 | 25.95 | 206 | 0.11 |
| 94 | 8.98 | 34.00 | 2.20 | 167 | 75 | 9.03 | 33.89 | 2.45 | 26.27 | 176 | 0.16 |
| 142 | 8.44 | 34.13 | 1.66 | 150 | 100 | 8.94 | 34.03 | 2.12 | 26.39 | 165 | 0.20 |
| 189 | 8.32 | 34.13 | 1.33 | 148 | 150 | 8.40 | 34.13 | 1.58 | 26.55 | 149 | 0.28 |
| 83.55 | BLACK DOUGLAS; May 12, 1952; 0926 GCT; 33°44'N, 120°24.5'W; sounding, 590 fm; wind, 320°, force 7; weather, light drizzle; sea, high; wire angle, 34°. | | | | | | | | | | |
| 0 | - | 33.46 | 6.20 | | 0 | 12.6 | 33.46 | 6.20 | 25.30 | 268 | 0.00 |
| 8 | 12.32 | 33.39 | 6.31 | 268 | 10 | 12.3 | 33.39 | 6.31 | 25.30 | 268 | 0.03 |
| 24 | - | 33.48 | 6.28 | | 20 | 12.1 | 33.47 | 6.31 | 25.40 | 258 | 0.05 |
| 50 | 10.61 | 33.44 | 4.70 | 235 | 30 | 11.8 | 33.48 | 6.11 | 25.47 | 252 | 0.08 |
| 75 | - | 33.60 | 3.87 | | 50 | 10.61 | 33.44 | 4.70 | 25.65 | 235 | 0.13 |
| 99 | 9.36 | 33.87 | 2.98 | 183 | 75 | 9.8 | 33.60 | 3.87 | 25.91 | 210 | 0.18 |
| 143 | 8.74 | 34.04 | 2.12 | 161 | 100 | 9.33 | 33.89 | 2.95 | 26.22 | 181 | 0.23 |
| 181 | 7.73 | 34.04 | 2.25 | 146 | 150 | 8.64 | 34.04 | 2.12 | 26.44 | 159 | 0.32 |
| 218 | 7.40 | 34.09 | 1.94 | 138 | 200 | 7.56 | 34.06 | 2.07 | 26.62 | 143 | 0.40 |
| 259 | 7.12 | 34.09 | 1.69 | 134 | 250 | 7.18 | 34.09 | 1.73 | 26.70 | 135 | 0.47 |
| 340 | 6.62 | 34.13 | 1.07 | 125 | 300 | 6.86 | 34.10 | 1.32 | 26.75 | 130 | 0.54 |
| 439 | 6.07 | 34.22 | 0.65 | 111 | 400 | 6.28 | 34.18 | 0.80 | 26.89 | 117 | 0.66 |
| 544 | 5.53 | 34.31 | 0.37 | 98 | 500 | 5.75 | 34.27 | 0.46 | 27.03 | 104 | 0.78 |
| 83.60 | BLACK DOUGLAS; May 12, 1952; 1553 GCT; 33°34'N, 120°45'W; sounding, 740 fm; wind, 310°, force 6; weather, overcast; sea, very rough; wire angle, 16°. | | | | | | | | | | |
| 0 | - | 33.33 | 6.22 | | 0 | 13.2 | 33.33 | 6.22 | 25.08 | 289 | 0.00 |
| 9 | 13.06 | 33.31 | 6.20 | 288 | 10 | 13.1 | 33.31 | 6.20 | 25.09 | 289 | 0.03 |
| 28 | - | 33.33 | 6.20 | | 20 | 13.0 | 33.32 | 6.20 | 25.11 | 286 | 0.06 |
| 57 | 11.43 | 33.31 | 5.61 | 258 | 30 | 13.0 | 33.33 | 6.19 | 25.12 | 285 | 0.09 |
| 85 | - | 33.43 | 4.19 | | 50 | 12.2 | 33.31 | 5.80 | 25.26 | 272 | 0.14 |
| 113 | 9.15 | 33.64 | 3.39 | 197 | 75 | 10.4 | 33.37 | 4.70 | 25.63 | 236 | 0.21 |
| 130 | 8.84 | 33.80 | 2.90 | 180 | 100 | 9.4 | 33.54 | 3.72 | 25.93 | 208 | 0.26 |
| 216 | 7.58 | 34.02 | 2.22 | 146 | 150 | 8.48 | 33.85 | 2.70 | 26.32 | 171 | 0.36 |
| 266 | 7.34 | 34.09 | 1.64 | 137 | 200 | 7.76 | 33.98 | 2.36 | 26.53 | 151 | 0.44 |
| 316 | 6.73 | 34.09 | 1.48 | 129 | 250 | 7.41 | 34.08 | 1.73 | 26.66 | 139 | 0.51 |
| 416 | 6.27 | 34.23 | 0.65 | 113 | 300 | 6.90 | 34.09 | 1.55 | 26.74 | 132 | 0.58 |
| 525 | 5.41 | 34.29 | 0.39 | 98 | 400 | 6.35 | 34.21 | 0.72 | 26.91 | 116 | 0.71 |
| 648 | 4.99 | 34.38 | 0.29 | 87 | 500 | 5.57 | 34.28 | 0.42 | 27.06 | 101 | 0.83 |
| | | | | | 600 | 5.11 | 34.34 | 0.30 | 27.16 | 91 | 0.93 |
| 83.70 | BLACK DOUGLAS; May 12, 1952; 2255 GCT; 33°14.5'N, 121°26'W; sounding, 2020 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°. | | | | | | | | | | |
| 0 | - | 33.10 | 6.25 | | 0 | 13.6 | 33.10 | 6.25 | 24.82 | 314 | 0.00 |
| 10 | 13.48 | 33.08 | 6.29 | 313 | 10 | 13.48 | 33.08 | 6.29 | 24.83 | 313 | 0.03 |
| 25 | - | 33.08 | 6.24 | | 20 | 13.2 | 33.08 | 6.28 | 24.89 | 307 | 0.06 |
| 50 | 12.62 | 33.10 | 6.20 | 295 | 30 | 12.9 | 33.08 | 6.24 | 24.95 | 302 | 0.09 |
| 73 | - | 33.12 | 5.74 | | 50 | 12.62 | 33.10 | 6.20 | 25.02 | 295 | 0.15 |
| 97 | 10.40 | 33.22 | 4.92 | 248 | 75 | 11.0 | 33.12 | 5.68 | 25.33 | 265 | 0.22 |
| 147 | 8.81 | 33.64 | 3.66 | 192 | 100 | 10.20 | 33.23 | 4.80 | 25.56 | 244 | 0.29 |
| 192 | 8.55 | 34.02 | 2.45 | 160 | 150 | 8.75 | 33.66 | 3.49 | 26.13 | 189 | 0.40 |
| 237 | 8.06 | 34.07 | 1.99 | 149 | 200 | 8.48 | 34.03 | 2.35 | 26.46 | 158 | 0.48 |
| 282 | 7.40 | 34.11 | 1.61 | 137 | 250 | 7.82 | 34.08 | 1.88 | 26.60 | 145 | 0.56 |
| 379 | 6.64 | 34.18 | 0.92 | 122 | 300 | 7.23 | 34.13 | 1.49 | 26.72 | 133 | 0.63 |
| 474 | 6.00 | 34.25 | 0.52 | 108 | 400 | 6.49 | 34.20 | 0.79 | 26.88 | 118 | 0.76 |
| 579 | 5.38 | 34.31 | 0.49 | 97 | 500 | 5.85 | 34.27 | 0.49 | 27.02 | 105 | 0.88 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; May 13, 1952; 0512, missing GCT; 32°54.5'N, 122°07.5'W; sounding, 2300 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 08°, missing. | | | | | | | | | | | 83.80 |
| 0 | - | 33.22 | 5.92 | | 0 | 14.8 | 33.22 | 5.92 | 24.66 | 329 | 0.00 |
| 10 | 14.82 | 33.23 | 6.15 | 328 | 10 | 14.82 | 33.23 | 6.15 | 24.67 | 328 | 0.03 |
| 25 | - | 33.22 | 5.98 | | 20 | 14.7 | 33.22 | 6.07 | 24.69 | 327 | 0.07 |
| 54 | 14.09 | 33.21 | 6.10 | 315 | 30 | 14.5 | 33.21 | 5.97 | 24.72 | 323 | 0.10 |
| 79 | - | 33.19 | 6.06 | | 50 | 14.1 | 33.21 | 6.08 | 24.80 | 315 | 0.16 |
| 107 | 9.92 | 33.31 | 4.60 | 233 | 75 | 13.0 | 33.19 | 6.07 | 25.01 | 295 | 0.24 |
| | | | | | 100 | 10.3 | 33.26 | 4.90 | 25.56 | 243 | 0.31 |
| 136 | 9.18 | 33.51 | 4.04 | 207 | 150 | 8.93 | 33.61 | 3.94 | 26.06 | 196 | 0.42 |
| 221 | 8.02 | 34.05 | 3.26 | 150 | 200 | 8.24 | 33.96 | 3.53 | 26.44 | 160 | 0.51 |
| 274 | 7.50 | 34.09 | 1.96 | 140 | 250 | 7.72 | 34.07 | 2.55 | 26.61 | 144 | 0.59 |
| 319 | 7.12 | 34.18 | 1.36 | 128 | 300 | 7.28 | 34.14 | 1.55 | 26.72 | 133 | 0.66 |
| 425 | 6.10 | 34.23 | 0.74 | 111 | 400 | 6.32 | 34.22 | 0.84 | 26.92 | 115 | 0.79 |
| 530 | 5.54 | 34.27 | 0.43 | 101 | 500 | 5.70 | 34.25 | 0.50 | 27.02 | 105 | 0.90 |
| 638 | 5.06 | 34.35 | 0.31 | 90 | 600 | 5.21 | 34.32 | 0.34 | 27.13 | 94 | 1.01 |
| BLACK DOUGLAS; May 13, 1952; 1121 GCT; 32°34.5'N, 122°48'W; sounding, 2200 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 04°. | | | | | | | | | | | 83.90 |
| 0 | - | 33.21 | 5.93 | | 0 | 15.3 | 33.21 | 5.93 | 24.55 | 340 | 0.00 |
| 10 | 15.22 | 33.21 | 5.92 | 338 | 10 | 15.22 | 33.21 | 5.92 | 24.57 | 338 | 0.03 |
| 25 | - | 33.24 | 5.94 | | 20 | 15.1 | 33.23 | 5.93 | 24.61 | 334 | 0.07 |
| 50 | 14.00 | 33.17 | 6.05 | 316 | 30 | 14.9 | 33.24 | 5.96 | 24.66 | 329 | 0.10 |
| 75 | - | 33.19 | 6.22 | | 50 | 14.0 | 33.17 | 6.05 | 24.79 | 316 | 0.17 |
| 99 | 10.28 | 33.28 | 4.69 | 241 | 75 | 12.8 | 33.19 | 6.22 | 25.05 | 292 | 0.24 |
| 149 | 8.71 | 33.78 | 3.11 | 180 | 100 | 10.20 | 33.29 | 4.60 | 25.61 | 239 | 0.31 |
| 194 | 8.11 | 34.02 | 2.68 | 153 | 150 | 8.67 | 33.79 | 3.10 | 26.24 | 178 | 0.41 |
| 239 | 7.60 | 34.04 | 2.34 | 145 | 200 | 8.02 | 34.03 | 2.65 | 26.53 | 151 | 0.50 |
| 283 | 7.32 | 34.11 | 1.78 | 136 | 250 | 7.51 | 34.05 | 2.22 | 26.62 | 143 | 0.57 |
| 381 | 6.70 | 34.25 | 0.84 | 117 | 300 | 7.23 | 34.15 | 1.53 | 26.74 | 131 | 0.64 |
| 476 | 6.00 | 34.29 | 0.58 | 105 | 400 | 6.55 | 34.26 | 0.78 | 26.92 | 114 | 0.77 |
| 577 | 5.42 | 34.36 | 0.34 | 93 | 500 | 5.83 | 34.30 | 0.52 | 27.04 | 103 | 0.89 |
| SPENCER F. BAIRD; May 9, 1952; 1251 GCT; 33°49'N, 118°37.5'W; sounding, 200 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 87.35 |
| 0 | 13.80 | 33.40 | 6.42 | 295 | 0 | 13.80 | 33.40 | 6.42 | 25.01 | 295 | 0.00 |
| 10 | 13.38 | 33.39 | 6.40 | 288 | 10 | 13.38 | 33.39 | 6.40 | 25.09 | 288 | 0.03 |
| 25 | 11.54 | 33.39 | 5.62 | 254 | 20 | 13.15 | 33.39 | 6.32 | 25.14 | 284 | 0.06 |
| 50 | 9.93 | 33.56 | 3.86 | 215 | 30 | 10.96 | 33.39 | 4.92 | 25.55 | 244 | 0.08 |
| 75 | 9.47 | 33.77 | 3.17 | 192 | 50 | 9.93 | 33.56 | 3.86 | 25.86 | 215 | 0.13 |
| 99 | 8.93 | 33.93 | 2.71 | 172 | 75 | 9.47 | 33.77 | 3.17 | 26.10 | 192 | 0.18 |
| 153 | 8.47 | 34.13 | 2.07 | 150 | 100 | 8.92 | 33.94 | 2.70 | 26.32 | 171 | 0.23 |
| 202 | 8.32 | 34.23 | 1.51 | 141 | 150 | 8.47 | 34.12 | 2.11 | 26.53 | 151 | 0.31 |
| 251 | 7.94 | 34.31 | 1.04 | 129 | 200 | 8.35 | 34.23 | 1.54 | 26.64 | 141 | 0.38 |
| 300 | 7.42 | 34.24 | 0.85 | 127 | 250 | 7.96 | 34.31 | 1.05 | 26.76 | 130 | 0.45 |
| 354 | 6.98 | 34.27 | 0.64 | 119 | 300 | 7.42 | 34.24 | 0.85 | 26.78 | 127 | 0.52 |
| SPENCER F. BAIRD; May 9, 1952; 1652 GCT; 33°40'N, 118°58'W; sounding, 470 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | | 87.40 |
| 0 | 15.70 | 33.33 | 6.02 | 339 | 0 | 15.70 | 33.33 | 6.02 | 24.55 | 339 | 0.00 |
| 10 | 12.90 | 33.28 | 6.72 | 287 | 10 | 12.90 | 33.28 | 6.72 | 25.10 | 287 | 0.03 |
| 25 | - | 33.39 | 5.08 | | 20 | 11.80 | 33.34 | 5.77 | 25.36 | 263 | 0.06 |
| 50 | 9.91 | 33.60 | 3.70 | 212 | 30 | 11.10 | 33.44 | 4.56 | 25.56 | 243 | 0.08 |
| 75 | - | 33.77 | 3.29 | | 50 | 9.91 | 33.60 | 3.70 | 25.90 | 212 | 0.13 |
| 100 | 9.02 | 33.93 | 2.76 | 173 | 75 | 9.30 | 33.77 | 3.29 | 26.13 | 189 | 0.18 |
| 154 | 8.67 | 34.09 | 1.96 | 156 | 100 | 9.02 | 33.93 | 2.76 | 26.30 | 173 | 0.23 |
| 202 | 8.16 | 34.18 | 1.41 | 142 | 150 | 8.70 | 34.08 | 2.02 | 26.47 | 157 | 0.31 |
| 251 | 7.81 | 34.23 | 1.15 | 133 | 200 | 8.17 | 34.17 | 1.43 | 26.62 | 143 | 0.39 |
| 299 | 7.36 | 34.23 | 0.91 | 127 | 250 | 7.82 | 34.23 | 1.15 | 26.72 | 134 | 0.46 |
| 403 | 6.59 | 34.31 | 0.41 | 111 | 300 | 7.36 | 34.23 | 0.89 | 26.78 | 127 | 0.52 |
| 502 | 5.96 | 34.36 | 0.26 | 100 | 400 | 6.62 | 34.30 | 0.43 | 26.94 | 112 | 0.65 |
| 607 | 5.49 | 34.38 | 0.24 | 93 | 500 | 5.97 | 34.36 | 0.26 | 27.07 | 100 | 0.76 |
| | | | | | 600 | 5.50 | 34.38 | 0.24 | 27.15 | 93 | 0.87 |

SIO

CCOFI
5205

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 87.50 | SPENCER F. BAIRD; May 9, 1952; 2302 GCT; 33°20.5'N, 119°40.5'W; sounding, 43 fm; wind, 270°, force 5; weather, partly cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | |
| 0 | 13.15 | 33.40 | 6.86 | 283 | 0 | 13.15 | 33.40 | 6.86 | 25.14 | 283 | 0.00 |
| 10 | 13.12 | 33.42 | 6.78 | 281 | 10 | 13.12 | 33.42 | 6.78 | 25.17 | 281 | 0.03 |
| 19 | 12.99 | 33.42 | 6.64 | 278 | 20 | 12.98 | 33.42 | 6.60 | 25.19 | 278 | 0.06 |
| 29 | 11.48 | 33.42 | 5.26 | 251 | 30 | 11.20 | 33.42 | 5.10 | 25.53 | 246 | 0.08 |
| 48 | 9.74 | 33.53 | 3.98 | 214 | 50 | (9.67) | (33.54) | (3.90) | (25.89) | (212) | (0.13) |
| 87.60 | SPENCER F. BAIRD; May 10, 1952; 0523 GCT; 32°58'N, 120°18'W; sounding, 380 fm; wind, 270°, force 5; weather, partly cloudy; sea, rough; wire angle, 23°. | | | | | | | | | | |
| 0 | 13.51 | 33.22 | 6.19 | 303 | 0 | 13.51 | 33.22 | 6.19 | 24.93 | 303 | 0.00 |
| 9 | 13.43 | 33.31 | 6.19 | 295 | 10 | 13.4 | 33.31 | 6.19 | 25.03 | 294 | 0.03 |
| 22 | - | 33.28 | 6.22 | | 20 | 13.4 | 33.28 | 6.22 | 25.00 | 296 | 0.06 |
| 46 | 13.23 | 33.30 | 6.16 | 292 | 30 | 13.4 | 33.29 | 6.21 | 25.01 | 296 | 0.09 |
| 69 | - | 33.24 | 5.31 | | 50 | 13.12 | 33.29 | 6.10 | 25.07 | 290 | 0.15 |
| 91 | 9.32 | 33.53 | 3.83 | 207 | 75 | 10.60 | 33.24 | 4.85 | 25.50 | 249 | 0.22 |
| | | | | | 100 | (9.07) | (33.63) | (3.44) | (26.06) | (196) | (0.27) |
| 87.70 | SPENCER F. BAIRD; May 10, 1952; 1203 GCT; 32°39.5'N, 121°02'W; sounding, 2100 fm; wind, 310°, force 5; weather, partly cloudy; sea, moderate; wire angle, 30°. | | | | | | | | | | |
| 0 | 13.34 | 33.08 | 6.28 | 310 | 0 | 13.34 | 33.08 | 6.28 | 24.86 | 310 | 0.00 |
| 8 | 13.24 | 33.06 | 6.26 | 310 | 10 | 13.2 | 33.06 | 6.29 | 24.87 | 309 | 0.03 |
| 21 | - | 33.08 | 6.43 | | 20 | 13.2 | 33.08 | 6.43 | 24.89 | 307 | 0.06 |
| 43 | 13.00 | 33.10 | 6.29 | 302 | 30 | 13.2 | 33.09 | 6.40 | 24.90 | 307 | 0.09 |
| 65 | - | 33.15 | 5.88 | | 50 | 12.8 | 33.12 | 6.22 | 25.00 | 297 | 0.15 |
| 84 | 10.38 | 33.22 | 5.02 | 247 | 75 | 10.5 | 33.17 | 5.45 | 25.46 | 253 | 0.22 |
| 125 | 9.27 | 33.62 | 3.45 | 200 | 100 | 9.75 | 33.36 | 4.45 | 25.74 | 227 | 0.28 |
| 158 | 8.73 | 33.89 | 2.67 | 172 | 150 | 8.84 | 33.85 | 2.75 | 26.26 | 176 | 0.38 |
| 195 | 8.34 | 33.95 | 2.39 | 162 | 200 | 8.29 | 33.96 | 2.34 | 26.44 | 160 | 0.47 |
| 231 | 8.03 | 34.04 | 2.07 | 151 | 250 | 7.86 | 34.06 | 1.90 | 26.58 | 147 | 0.55 |
| 312 | 7.26 | 34.07 | 1.47 | 138 | 300 | 7.35 | 34.07 | 1.54 | 26.66 | 139 | 0.62 |
| 396 | 6.51 | 34.11 | 1.06 | 125 | 400 | 6.48 | 34.12 | 1.02 | 26.82 | 124 | 0.76 |
| 492 | 5.68 | 34.18 | 0.58 | 110 | 500 | (5.61) | (34.18) | (0.58) | (26.98) | (109) | (0.88) |
| 87.80 | SPENCER F. BAIRD; May 10, 1952; 1756 GCT; 32°17'N, 121°44.5'W; sounding, 2000+ fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 11°. | | | | | | | | | | |
| 0 | 14.71 | 33.19 | 5.93 | 329 | 0 | 14.71 | 33.19 | 5.93 | 24.66 | 329 | 0.00 |
| 10 | 14.60 | 33.12 | 5.91 | 332 | 10 | 14.60 | 33.12 | 5.91 | 24.63 | 332 | 0.03 |
| 24 | - | 33.12 | 5.88 | | 20 | 14.5 | 33.12 | 5.89 | 24.65 | 330 | 0.07 |
| 54 | 14.02 | 33.12 | 5.97 | 320 | 30 | 14.4 | 33.12 | 5.89 | 24.67 | 328 | 0.10 |
| 78 | - | 33.06 | 5.85 | | 50 | 14.1 | 33.12 | 5.96 | 24.74 | 322 | 0.16 |
| | | | | | 75 | 11.7 | 33.08 | 5.87 | 25.18 | 280 | 0.24 |
| 90.28 | SPENCER F. BAIRD; May 12, 1952; 2132 GCT; 33°27.5'N, 117°48'W; sounding, 350 fm; wind, 270°, force 1; weather, cloudy; sea, slight; wire angle, 22°. | | | | | | | | | | |
| 0 | 15.82 | 33.31 | 6.30 | 343 | 0 | 15.82 | 33.31 | 6.30 | 24.51 | 343 | 0.00 |
| 8 | 14.14 | 33.31 | 6.49 | 309 | 10 | 14.0 | 33.31 | 6.48 | 24.90 | 306 | 0.03 |
| 22 | - | 33.31 | 6.34 | | 20 | 12.7 | 33.31 | 6.37 | 25.16 | 281 | 0.06 |
| 46 | 9.64 | 33.57 | 6.06 | 209 | 30 | 11.1 | 33.31 | 6.26 | 25.46 | 253 | 0.09 |
| 69 | 9.39 | 33.84 | 2.96 | 186 | 50 | 9.50 | 33.69 | 4.29 | 26.03 | 198 | 0.13 |
| 91 | 9.30 | 33.93 | 2.46 | 178 | 75 | 9.37 | 33.87 | 2.70 | 26.20 | 183 | 0.18 |
| 137 | 8.78 | 34.02 | 2.25 | 163 | 100 | 9.28 | 33.95 | 2.39 | 26.27 | 176 | 0.23 |
| 179 | 8.11 | 34.04 | 1.92 | 152 | 150 | 8.44 | 34.03 | 2.18 | 26.47 | 157 | 0.31 |
| 223 | 7.94 | 34.05 | 1.49 | 149 | 200 | 8.04 | 34.04 | 1.71 | 26.54 | 151 | 0.39 |
| 267 | 7.58 | 34.16 | 1.19 | 135 | 250 | 7.69 | 34.11 | 1.30 | 26.64 | 141 | 0.46 |
| 319 | 7.40 | 34.23 | 0.94 | 128 | 300 | 7.47 | 34.22 | 1.04 | 26.76 | 129 | 0.53 |
| 367 | 7.06 | 34.23 | 0.82 | 123 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| SPENCER F. BAIRD; May 12, 1952; 1942 GCT; 33°24.5'N, 117°55'W; sounding, 300 fm; wind, 220°, force 1; weather, cloudy; sea, slight; wire angle, 07°. | | | | | | | | | | | 90.30 |
| 0 | 16.89 | 33.31 | 5.93 | 367 | 0 | 16.89 | 33.31 | 5.93 | 24.26 | 367 | 0.00 |
| 10 | 16.16 | 33.35 | 5.98 | 348 | 10 | 16.16 | 33.35 | 5.98 | 24.46 | 348 | 0.04 |
| 25 | - | 33.35 | 6.15 | | 20 | 13.4 | 33.35 | 6.12 | 25.06 | 291 | 0.07 |
| 50 | 10.31 | 33.50 | 4.13 | 225 | 30 | 11.7 | 33.35 | 6.12 | 25.39 | 260 | 0.10 |
| 75 | - | 33.73 | 3.25 | | 50 | 10.31 | 33.50 | 4.13 | 25.75 | 225 | 0.14 |
| 99 | 9.13 | 33.84 | 3.01 | 182 | 75 | 9.8 | 33.73 | 3.25 | 26.02 | 200 | 0.20 |
| 152 | 8.47 | 34.07 | 2.13 | 155 | 100 | 9.05 | 33.84 | 3.00 | 26.22 | 180 | 0.25 |
| 199 | 8.19 | 34.16 | 1.69 | 144 | 150 | 8.50 | 34.06 | 2.20 | 26.48 | 156 | 0.33 |
| 246 | 7.89 | 34.23 | 1.10 | 135 | 200 | 8.17 | 34.16 | 1.68 | 26.61 | 144 | 0.41 |
| 295 | 7.52 | 34.25 | 0.84 | 128 | 250 | 7.86 | 34.23 | 1.07 | 26.71 | 134 | 0.48 |
| 348 | 7.07 | 34.25 | 0.71 | 122 | 300 | 7.48 | 34.25 | 0.84 | 26.78 | 127 | 0.55 |
| 397 | 6.72 | 34.33 | 0.57 | 111 | 400 | 6.71 | 34.33 | 0.56 | 26.95 | 111 | 0.67 |
| 495 | 6.10 | 34.29 | 0.36 | 107 | 500 | (6.06) | (34.28) | (0.36) | (27.00) | (107) | (0.79) |
| SPENCER F. BAIRD; May 12, 1952; 1541 GCT; 33°12'N, 118°22'W; sounding, 650 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 13°. | | | | | | | | | | | 90.37 |
| 0 | 15.89 | 33.35 | 5.89 | 342 | 0 | 15.89 | 33.35 | 5.89 | 24.52 | 342 | 0.00 |
| 9 | 15.82 | 33.35 | 5.84 | 340 | 10 | 15.8 | 33.35 | 5.86 | 24.55 | 340 | 0.03 |
| 24 | - | 33.32 | 6.39 | | 20 | 15.3 | 33.33 | 6.38 | 24.64 | 331 | 0.07 |
| 48 | - | 33.40 | 4.42 | | 30 | 11.7 | 33.33 | 5.50 | 25.37 | 261 | 0.10 |
| 73 | - | 33.60 | 3.73 | | 50 | 10.5 | 33.42 | 4.33 | 25.65 | 234 | 0.15 |
| 97 | - | 33.82 | 3.07 | | 75 | 9.6 | 33.60 | 3.70 | 25.95 | 207 | 0.20 |
| 148 | 8.48 | 33.97 | 2.68 | 162 | 100 | 9.3 | 33.84 | 3.01 | 26.18 | 184 | 0.25 |
| 193 | 8.28 | 34.16 | 1.83 | 145 | 150 | 8.47 | 33.98 | 2.64 | 26.42 | 161 | 0.34 |
| 238 | - | 34.18 | 1.30 | | 200 | 8.22 | 34.16 | 1.73 | 26.60 | 144 | 0.42 |
| 283 | 7.24 | 34.20 | 0.94 | 128 | 250 | 7.57 | 34.19 | 1.18 | 26.72 | 133 | 0.49 |
| 379 | 6.68 | 34.29 | 0.55 | 114 | 300 | 7.16 | 34.21 | 0.86 | 26.80 | 126 | 0.56 |
| 472 | 6.16 | 34.31 | 0.42 | 106 | 400 | 6.57 | 34.29 | 0.53 | 26.94 | 112 | 0.68 |
| 570 | 5.58 | 34.36 | 0.30 | 95 | 500 | 5.98 | 34.32 | 0.38 | 27.04 | 103 | 0.79 |
| 665 | 5.10 | 34.38 | 0.30 | 88 | 600 | 5.42 | 34.37 | 0.30 | 27.15 | 93 | 0.90 |
| 767 | 4.70 | 34.39 | 0.36 | 83 | 700 | 4.95 | 34.38 | 0.30 | 27.21 | 87 | 1.00 |
| 966 | 4.30 | 34.45 | 0.42 | 75 | 800 | 4.61 | 34.39 | 0.37 | 27.26 | 82 | 1.09 |
| | | | | | 1000 | (4.26) | (34.45) | (0.42) | (27.34) | (74) | (1.26) |
| SPENCER F. BAIRD; May 12, 1952; 1055 GCT; 32°54.5'N, 118°56'W; sounding, 900 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 33°. | | | | | | | | | | | 90.45 |
| 0 | 14.42 | 33.40 | 6.06 | 308 | 0 | 14.42 | 33.40 | 6.06 | 24.88 | 308 | 0.00 |
| 8 | 14.34 | 33.40 | 6.00 | 306 | 10 | 14.30 | 33.40 | 6.01 | 24.91 | 305 | 0.03 |
| 20 | - | 33.40 | 6.11 | | 20 | 13.00 | 33.40 | 6.11 | 25.17 | 280 | 0.06 |
| 47 | 10.28 | 33.49 | 4.33 | 226 | 30 | 12.50 | 33.41 | 6.01 | 25.28 | 270 | 0.09 |
| 67 | - | 33.68 | 3.54 | | 50 | 10.10 | 33.53 | 4.20 | 25.81 | 220 | 0.14 |
| 90 | 9.03 | 33.89 | 2.91 | 176 | 75 | 9.30 | 33.76 | 3.24 | 26.12 | 190 | 0.19 |
| 133 | 8.41 | 33.98 | 2.57 | 161 | 100 | 9.00 | 33.91 | 2.80 | 26.29 | 174 | 0.23 |
| 174 | 8.04 | 34.09 | 1.93 | 147 | 150 | 8.26 | 34.03 | 2.34 | 26.49 | 155 | 0.32 |
| SPENCER F. BAIRD; May 12, 1952; 0530 GCT; 32°38'N, 119°29.5'W; sounding, 550 fm; wind, 270°, force 5; weather, clear; sea, rough; wire angle, 30°. | | | | | | | | | | | 90.53 |
| 0 | 13.60 | 33.30 | 6.12 | 299 | 0 | 13.6 | 33.30 | 6.12 | 24.98 | 299 | 0.00 |
| 10 | 13.53 | 33.30 | 6.12 | 297 | 10 | 13.53 | 33.30 | 6.12 | 24.99 | 297 | 0.03 |
| 21 | - | 33.30 | 6.13 | | 20 | 13.6 | 33.30 | 6.13 | 24.98 | 299 | 0.06 |
| 43 | - | 33.30 | 6.18 | | 30 | 13.5 | 33.30 | 6.15 | 25.00 | 297 | 0.09 |
| 66 | - | 33.17 | 5.79 | | 50 | 13.3 | 33.29 | 6.12 | 25.03 | 294 | 0.15 |
| 86 | - | 33.30 | 4.79 | | 75 | 11.0 | 33.20 | 5.28 | 25.40 | 259 | 0.22 |
| 132 | 8.72 | 33.87 | 3.27 | 173 | 100 | 9.5 | 33.69 | 3.87 | 26.03 | 198 | 0.28 |
| 170 | 8.22 | 33.96 | 2.83 | 159 | 150 | 8.50 | 33.91 | 3.06 | 26.36 | 167 | 0.37 |
| 210 | - | 34.05 | 2.19 | | 200 | 7.86 | 34.03 | 2.41 | 26.55 | 149 | 0.45 |
| 251 | 7.33 | 34.16 | 1.45 | 132 | 250 | 7.33 | 34.16 | 1.45 | 26.73 | 132 | 0.52 |
| 335 | 6.82 | 34.22 | 0.88 | 121 | 300 | 7.00 | 34.21 | 1.06 | 26.82 | 124 | 0.59 |
| 418 | 6.39 | 34.31 | 0.53 | 109 | 400 | 6.48 | 34.30 | 0.59 | 26.96 | 111 | 0.71 |
| 505 | 5.86 | 34.32 | 0.39 | 101 | 500 | 5.88 | 34.32 | 0.41 | 27.05 | 102 | 0.82 |
| 591 | 5.33 | 34.33 | 0.29 | 95 | 600 | 5.29 | 34.33 | 0.30 | 27.13 | 94 | 0.93 |
| 685 | 4.86 | 34.42 | 0.34 | 83 | 700 | 4.80 | 34.42 | 0.37 | 27.26 | 82 | 1.02 |
| 780 | 4.61 | 34.43 | 0.37 | 79 | 800 | (4.58) | (34.43) | | (27.29) | (79) | (1.11) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 90.60 | SPENCER F. BAIRD; May 12, 1952; 0027 GCT; 32°25'N, 119°56'W; sounding, 580 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 14.62 | 33.17 | 6.43 | 329 | 0 | 14.62 | 33.17 | 6.43 | 24.66 | 329 | 0.00 |
| 9 | 14.48 | 33.19 | 5.83 | 324 | 10 | 14.5 | 33.19 | 5.84 | 24.71 | 325 | 0.03 |
| 28 | - | 33.21 | 5.98 | | 20 | 14.4 | 33.21 | 5.89 | 24.74 | 321 | 0.07 |
| 56 | 12.82 | 33.15 | 6.20 | 295 | 30 | 14.2 | 33.21 | 5.99 | 24.78 | 317 | 0.10 |
| 84 | - | 33.08 | 5.67 | | 50 | 13.6 | 33.18 | 6.19 | 24.88 | 308 | 0.16 |
| 110 | 9.66 | 33.31 | 4.63 | 229 | 75 | 12.2 | 33.09 | 5.26 | 25.09 | 288 | 0.23 |
| 162 | 8.62 | 33.78 | 3.89 | 178 | 100 | 10.0 | 33.17 | 4.80 | 25.55 | 245 | 0.30 |
| 214 | 7.92 | 34.05 | 2.49 | 148 | 150 | 9.02 | 33.68 | 4.08 | 26.10 | 192 | 0.41 |
| | | | | | 200 | 8.09 | 34.03 | 2.77 | 26.52 | 152 | 0.50 |
| 90.70 | SPENCER F. BAIRD; May 11, 1952; 1617 GCT; 32°04.5'N, 120°40'W; sounding, 2050 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 35°. | | | | | | | | | | |
| 0 | 14.76 | 33.15 | 5.97 | 333 | 0 | 14.76 | 33.15 | 5.97 | 24.62 | 333 | 0.00 |
| 8 | 14.68 | 33.17 | 6.05 | 330 | 10 | 14.6 | 33.17 | 6.04 | 24.67 | 328 | 0.03 |
| 19 | - | 33.15 | 5.89 | | 20 | 14.6 | 33.15 | 5.89 | 24.65 | 330 | 0.07 |
| 45 | - | 33.10 | 6.05 | | 30 | 14.5 | 33.13 | 5.93 | 24.66 | 329 | 0.10 |
| 66 | - | 33.08 | 6.18 | | 50 | 13.8 | 33.09 | 6.09 | 24.77 | 318 | 0.16 |
| 90 | - | 33.08 | 6.14 | | 75 | 13.3 | 33.08 | 6.17 | 24.87 | 309 | 0.24 |
| 132 | 10.28 | 33.39 | 4.91 | 233 | 100 | 12.1 | 33.09 | 6.10 | 25.11 | 286 | 0.32 |
| 171 | 8.98 | 33.71 | 4.02 | 189 | 150 | 9.54 | 33.57 | 4.41 | 25.93 | 208 | 0.44 |
| 217 | - | 33.91 | 3.57 | | 200 | 8.47 | 33.85 | 3.68 | 26.32 | 171 | 0.54 |
| 255 | 7.70 | 33.98 | 3.26 | 150 | 250 | 7.78 | 33.97 | 3.28 | 26.52 | 152 | 0.62 |
| 343 | 6.72 | 34.05 | 1.93 | 132 | 300 | 7.17 | 34.01 | 2.69 | 26.64 | 141 | 0.70 |
| 430 | 5.95 | 34.18 | 0.92 | 113 | 400 | 6.17 | 34.13 | 1.20 | 26.87 | 119 | 0.83 |
| 517 | 5.52 | 34.27 | 0.52 | 101 | 500 | 5.60 | 34.26 | 0.56 | 27.04 | 103 | 0.95 |
| 694 | 4.78 | 34.38 | 0.34 | 85 | 600 | 5.20 | 34.32 | 0.40 | 27.13 | 94 | 1.05 |
| 881 | 4.20 | 34.47 | 0.41 | 72 | 700 | 4.75 | 34.38 | 0.35 | 27.23 | 84 | 1.15 |
| 1074 | 3.72 | 34.52 | 0.62 | 64 | 800 | 4.44 | 34.43 | 0.37 | 27.31 | 77 | 1.24 |
| | | | | | 1000 | 3.90 | 34.51 | 0.53 | 27.43 | 66 | 1.40 |
| 90.80 | SPENCER F. BAIRD; May 11, 1952; 0858 GCT; 31°45'N, 121°19'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | 15.63 | 33.33 | - | 338 | 0 | 15.63 | 33.33 | | 24.57 | 338 | 0.00 |
| 8 | 15.54 | 33.35 | 5.83 | 334 | 10 | 15.6 | 33.35 | 5.84 | 24.59 | 336 | 0.03 |
| 22 | - | 33.33 | 5.88 | | 20 | 15.6 | 33.33 | 5.88 | 24.57 | 337 | 0.07 |
| 45 | 15.46 | 33.44 | 5.88 | 326 | 30 | 15.6 | 33.35 | 5.88 | 24.59 | 336 | 0.10 |
| 69 | - | 33.35 | 5.84 | | 50 | 15.2 | 33.43 | 5.87 | 24.74 | 321 | 0.17 |
| 90 | 14.99 | 33.40 | 5.91 | 319 | 75 | 15.1 | 33.36 | 5.86 | 24.71 | 325 | 0.25 |
| 137 | 11.44 | 33.22 | 5.43 | 265 | 100 | 14.90 | 33.39 | 5.89 | 24.77 | 318 | 0.33 |
| 178 | 9.55 | 33.46 | 4.54 | 216 | 150 | 10.44 | 33.25 | 5.16 | 25.53 | 246 | 0.47 |
| 220 | 8.74 | 33.80 | 3.95 | 179 | 200 | 9.12 | 33.64 | 4.20 | 26.06 | 196 | 0.58 |
| 261 | 7.96 | 33.98 | 3.24 | 154 | 250 | 8.17 | 33.97 | 3.45 | 26.46 | 158 | 0.67 |
| 353 | 6.93 | 34.02 | 2.00 | 137 | 300 | 7.47 | 33.99 | 2.65 | 26.58 | 147 | 0.75 |
| 446 | 6.06 | 34.11 | 1.18 | 120 | 400 | 6.44 | 34.05 | 1.56 | 26.77 | 129 | 0.90 |
| 546 | 5.50 | 34.27 | 0.55 | 101 | 500 | 5.68 | 34.20 | 0.79 | 26.98 | 108 | 1.02 |
| 90.90 | SPENCER F. BAIRD; May 11, 1952; 0218, 0307 GCT; 31°25'N, 121°59'W; sounding, 2000 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 27°, 30°. | | | | | | | | | | |
| 0 | 15.69 | 33.28 | 6.07 | 343 | 0 | 15.69 | 33.28 | 6.07 | 24.52 | 343 | 0.00 |
| 8 | 15.62 | 33.30 | 5.79 | 340 | 10 | 15.6 | 33.31 | 5.71 | 24.56 | 339 | 0.03 |
| 21 | - | 33.39 | 5.54 | | 20 | 15.7 | 33.39 | 5.55 | 24.60 | 335 | 0.07 |
| 44 | - | 33.45 | 5.71 | | 30 | 15.8 | 33.43 | 5.60 | 24.61 | 334 | 0.10 |
| 67 | - | 33.30 | 5.90 | | 50 | 15.6 | 33.44 | 5.76 | 24.66 | 329 | 0.17 |
| 88 | - | 33.28 | 6.17 | | 75 | 14.9 | 33.29 | 6.08 | 24.70 | 326 | 0.25 |
| 135 | 13.45 | 33.39 | 5.72 | 289 | 100 | 13.5 | 33.29 | 6.15 | 24.99 | 298 | 0.33 |
| 177 | 10.26 | 33.39 | 4.86 | 233 | 150 | 11.80 | 33.39 | 5.40 | 25.40 | 259 | 0.47 |
| 219 | - | 33.78 | 4.07 | | 200 | 9.72 | 33.63 | 4.41 | 25.95 | 206 | 0.59 |
| 261 | 8.46 | 33.96 | 3.42 | 163 | 250 | 8.66 | 33.92 | 3.58 | 26.35 | 169 | 0.68 |
| 349 | 6.97 | 34.04 | 1.95 | 136 | 300 | 7.72 | 34.02 | 2.78 | 26.57 | 148 | 0.76 |
| 436 | 5.95 | 34.04 | 1.08 | 124 | 400 | 6.30 | 34.04 | 1.31 | 26.78 | 128 | 0.91 |
| 527 | 5.60 | 34.22 | 1.28 | 106 | 500 | 5.66 | 34.17 | 1.21 | 26.96 | 110 | 1.03 |
| | | | | | 600 | 5.31 | 34.26 | 1.20 | 27.07 | 100 | 1.14 |
| 719 | 4.74 | 34.33 | 0.97 | 88 | 700 | 4.83 | 34.31 | 1.00 | 27.17 | 91 | 1.25 |
| 905 | 4.14 | 34.45 | 0.46 | 73 | 800 | 4.47 | 34.40 | 0.75 | 27.28 | 80 | 1.34 |
| 1102 | 3.64 | 34.47 | 0.71 | 67 | 1000 | 3.88 | 34.46 | 0.54 | 27.39 | 70 | 1.51 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| E. W. SCRIPPS; May 14, 1952; 0355 GCT; 32°56'N, 117°20'W; sounding, 150 fm; wind, 290°, force 1; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | | 93.27 |
| 0 | 17.26 | 33.39 | 6.47 | 369 | 0 | 17.26 | 33.39 | 6.47 | 24.24 | 369 | 0.00 |
| 10 | 12.23 | 33.42 | 6.82 | 264 | 10 | 12.23 | 33.42 | 6.82 | 25.34 | 264 | 0.03 |
| 25 | 10.04 | 33.60 | 3.79 | 214 | 20 | 10.52 | 33.51 | 4.02 | 25.72 | 228 | 0.06 |
| 50 | 9.35 | 33.87 | 3.09 | 183 | 30 | 9.79 | 33.67 | 3.61 | 25.97 | 204 | 0.08 |
| 74 | 9.22 | 34.04 | 2.34 | 168 | 50 | 9.35 | 33.87 | 3.09 | 26.20 | 183 | 0.12 |
| 97 | 8.97 | 34.09 | 2.28 | 161 | 75 | 9.21 | 34.04 | 2.34 | 26.35 | 168 | 0.16 |
| 148 | 8.57 | 34.09 | 2.06 | 155 | 100 | 8.93 | 34.09 | 2.26 | 26.44 | 160 | 0.20 |
| | | | | | 150 | (8.54) | (34.09) | (2.06) | (26.50) | (154) | (0.28) |
| E. W. SCRIPPS; May 14, 1952; 0628 GCT; 32°50'N, 117°32'W; sounding, 520 fm; wind, 270°, force 1; weather, clear; sea, slight; wire angle, 05°. | | | | | | | | | | | 93.30 |
| 0 | - | 33.35 | 5.61 | | 0 | 17.6 | 33.35 | 5.61 | 24.13 | 380 | 0.00 |
| 10 | 16.81 | 33.31 | 5.75 | 365 | 10 | 16.81 | 33.31 | 5.75 | 24.28 | 365 | 0.04 |
| 25 | - | 33.28 | 6.41 | | 20 | 13.9 | 33.28 | 6.41 | 24.90 | 306 | 0.07 |
| 50 | 10.94 | 33.46 | 4.40 | 239 | 30 | 12.1 | 33.30 | 5.75 | 25.27 | 271 | 0.10 |
| 76 | - | 33.71 | 3.50 | | 50 | 10.94 | 33.46 | 4.40 | 25.61 | 239 | 0.15 |
| 100 | 9.25 | 33.91 | 2.89 | 178 | 75 | 9.5 | 33.71 | 3.50 | 26.05 | 197 | 0.21 |
| 154 | 8.72 | 34.09 | 2.25 | 157 | 100 | 9.25 | 33.91 | 2.89 | 26.25 | 178 | 0.25 |
| 203 | 8.18 | 34.13 | 1.90 | 146 | 150 | 8.77 | 34.08 | 2.29 | 26.46 | 158 | 0.34 |
| 252 | 8.22 | 34.23 | 1.24 | 139 | 200 | 8.22 | 34.13 | 1.93 | 26.58 | 147 | 0.42 |
| 299 | 7.70 | 34.23 | 1.16 | 132 | 250 | 8.22 | 34.23 | 1.25 | 26.66 | 139 | 0.49 |
| 402 | 6.82 | 34.27 | 0.69 | 117 | 300 | 7.68 | 34.23 | 1.15 | 26.74 | 132 | 0.56 |
| 500 | 6.06 | 34.31 | 0.40 | 105 | 400 | 6.83 | 34.27 | 0.71 | 26.89 | 117 | 0.69 |
| 606 | 5.50 | 34.34 | 0.41 | 96 | 500 | 6.06 | 34.31 | 0.40 | 27.02 | 105 | 0.81 |
| | | | | | 600 | 5.52 | 34.34 | 0.41 | 27.11 | 96 | 0.91 |
| E. W. SCRIPPS; May 14, 1952; 1307 GCT; 32°31'N, 118°13.5'W; sounding, 900 fm; wind, 290°, force 3; weather, overcast; sea, moderate; wire angle, 20°. | | | | | | | | | | | 93.40 |
| 0 | 15.65 | 33.35 | 5.92 | 337 | 0 | 15.65 | 33.35 | 5.92 | 24.58 | 337 | 0.00 |
| 9 | 15.59 | 33.35 | 5.94 | 336 | 10 | 15.5 | 33.35 | 5.93 | 24.61 | 334 | 0.03 |
| 23 | - | 33.39 | 5.81 | | 20 | 14.1 | 33.39 | 5.83 | 24.94 | 302 | 0.07 |
| 47 | 11.66 | 33.30 | 5.70 | 263 | 30 | 13.6 | 33.37 | 5.77 | 25.03 | 294 | 0.10 |
| 70 | - | 33.53 | 5.57 | | 50 | 11.4 | 33.30 | 5.69 | 25.40 | 258 | 0.15 |
| 93 | 9.46 | 33.82 | 5.09 | 188 | 75 | 9.7 | 33.63 | 5.50 | 25.95 | 206 | 0.21 |
| 142 | 8.72 | 34.04 | 3.60 | 161 | 100 | 9.36 | 33.87 | 4.90 | 26.20 | 183 | 0.26 |
| 188 | 8.18 | 34.13 | 3.27 | 146 | 150 | 8.61 | 34.06 | 3.51 | 26.46 | 157 | 0.34 |
| 234 | 7.73 | 34.18 | 2.67 | 136 | 200 | 8.05 | 34.15 | 3.14 | 26.62 | 143 | 0.42 |
| 280 | 7.40 | 34.18 | 1.95 | 131 | 250 | 7.62 | 34.18 | 2.39 | 26.71 | 134 | 0.49 |
| 379 | 6.54 | 34.25 | 1.04 | 115 | 300 | 7.24 | 34.18 | 1.69 | 26.76 | 129 | 0.56 |
| 473 | 6.02 | 34.33 | 0.58 | 103 | 400 | 6.40 | 34.28 | 0.92 | 26.95 | 111 | 0.69 |
| 578 | 5.42 | 34.33 | 0.31 | 96 | 500 | 5.90 | 34.33 | 0.49 | 27.06 | 101 | 0.80 |
| E. W. SCRIPPS; May 14, 1952; 1953, 2018, 2038 GCT; 32°09.5'N, 118°47'W; sounding, 800 fm; wind, 280°, force 5; weather, cloudy; sea, rough; wire angle, 18°, 19°, 20°. | | | | | | | | | | | 93.50 |
| 0 | 13.71 | 33.32 | 5.74 | 300 | 0 | 13.71 | 33.32 | 5.74 | 24.97 | 300 | 0.00 |
| 9 | 13.68 | 33.33 | 6.00 | 298 | 10 | 13.7 | 33.33 | 6.00 | 24.98 | 299 | 0.03 |
| 25 | - | 33.33 | 5.84 | | 20 | 13.7 | 33.33 | 5.88 | 24.98 | 299 | 0.06 |
| 54 | 13.10 | 33.31 | 5.66 | 289 | 30 | 13.6 | 33.33 | 5.82 | 25.00 | 297 | 0.09 |
| 78 | - | 33.29 | 4.64 | | 50 | 13.4 | 33.31 | 5.75 | 25.03 | 294 | 0.15 |
| 105 | 9.40 | 33.48 | 3.97 | 212 | 75 | 12.3 | 33.29 | 4.78 | 25.23 | 275 | 0.22 |
| 156 | 8.72 | 33.86 | 3.17 | 174 | 100 | 9.6 | 33.42 | 4.06 | 25.81 | 220 | 0.28 |
| | | | | | 150 | 8.83 | 33.82 | 3.26 | 26.24 | 179 | 0.38 |
| 193 | 7.92 | 34.02 | 2.51 | 151 | 200 | 7.87 | 34.04 | 2.40 | 26.56 | 148 | 0.47 |
| 244 | 7.91 | 34.13 | 1.62 | 142 | 250 | 7.88 | 34.14 | 1.56 | 26.64 | 141 | 0.54 |
| 295 | 7.39 | 34.18 | 1.21 | 131 | 300 | 7.35 | 34.18 | 1.19 | 26.75 | 131 | 0.61 |
| | | | | | 400 | 6.68 | 34.28 | 0.82 | 26.92 | 115 | 0.74 |
| 413 | 6.58 | 34.29 | 0.77 | 113 | 500 | 6.05 | 34.34 | 0.51 | 27.05 | 102 | 0.85 |
| 516 | 5.96 | 34.34 | 0.50 | 101 | 600 | 5.50 | 34.34 | 0.46 | 27.11 | 96 | 0.96 |
| 620 | 5.40 | 34.34 | 0.46 | 95 | | | | | | | |

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5205

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 93.60 | E. W. SCRIPPS; May 15, 1952; 0415 GCT; 31°51.5'N, 119°35.5'W; sounding, 1750 fm; wind, 290°, force 5; weather, partly cloudy; sea, very rough; wire angle, 35°. | | | | | | | | | | |
| 0 | 14.24 | 33.21 | 5.84 | 318 | 0 | 14.24 | 33.21 | 5.84 | 24.78 | 318 | 0.00 |
| 8 | 14.23 | 33.21 | 5.88 | 318 | 10 | 14.2 | 33.21 | 5.87 | 24.78 | 317 | 0.03 |
| 24 | - | 33.21 | 5.84 | | 20 | 14.2 | 33.21 | 5.85 | 24.78 | 317 | 0.06 |
| 49 | 14.06 | 33.21 | 5.74 | 314 | 30 | 14.2 | 33.21 | 5.82 | 24.78 | 317 | 0.10 |
| 72 | - | 33.08 | 5.66 | | 50 | 14.0 | 33.21 | 5.74 | 24.83 | 313 | 0.16 |
| 96 | 11.29 | 33.28 | 5.07 | 258 | 75 | 12.2 | 33.08 | 5.64 | 25.08 | 289 | 0.23 |
| 142 | 9.03 | 33.86 | 3.63 | 179 | 100 | 11.10 | 33.37 | 4.68 | 25.51 | 248 | 0.30 |
| 188 | 8.41 | 33.87 | 3.29 | 169 | 150 | 8.93 | 33.86 | 3.58 | 26.26 | 177 | 0.41 |
| 235 | 7.78 | 33.98 | 2.69 | 152 | 200 | 8.24 | 33.88 | 3.16 | 26.38 | 165 | 0.50 |
| 282 | 7.14 | 34.07 | 2.00 | 136 | 250 | 7.58 | 34.01 | 2.49 | 26.58 | 147 | 0.58 |
| 376 | 6.36 | 34.17 | 1.08 | 119 | 300 | 6.94 | 34.09 | 1.77 | 26.73 | 132 | 0.65 |
| 477 | 5.75 | 34.22 | 0.61 | 108 | 400 | 6.20 | 34.18 | 0.92 | 26.90 | 116 | 0.78 |
| 581 | 5.34 | 34.29 | 0.38 | 98 | 500 | 5.64 | 34.23 | 0.53 | 27.01 | 106 | 0.89 |
| | | | | | 600 | (5.30) | (34.29) | | (27.10) | (97) | (1.00) |
| 93.70 | E. W. SCRIPPS; May 15, 1952; 1120 GCT; 31°28'N, 120°18'W; sounding, 2000 fm; wind, 300°, force 6; weather, partly cloudy; sea, very rough; wire angle, 34°. | | | | | | | | | | |
| 0 | 15.50 | 33.42 | 5.70 | 329 | 0 | 15.50 | 33.42 | 5.70 | 24.67 | 329 | 0.00 |
| 8 | 15.49 | 33.40 | 5.74 | 330 | 10 | 15.5 | 33.40 | 5.74 | 24.65 | 330 | 0.03 |
| 24 | - | 33.40 | 5.80 | | 20 | 15.5 | 33.40 | 5.78 | 24.65 | 330 | 0.07 |
| 50 | 15.51 | 33.42 | 5.82 | 329 | 30 | 15.5 | 33.40 | 5.82 | 24.65 | 330 | 0.10 |
| 73 | - | 33.40 | 5.72 | | 50 | 15.51 | 33.42 | 5.82 | 24.66 | 329 | 0.17 |
| 96 | 13.84 | 33.26 | 5.83 | 306 | 75 | 15.2 | 33.40 | 5.72 | 24.72 | 324 | 0.25 |
| 141 | 10.92 | 33.26 | 5.21 | 253 | 100 | 13.60 | 33.25 | 5.70 | 24.94 | 303 | 0.33 |
| 186 | 9.06 | 33.66 | 4.22 | 194 | 150 | 10.23 | 33.30 | 5.08 | 25.61 | 239 | 0.46 |
| 234 | 8.36 | 33.93 | 3.30 | 163 | 200 | 8.84 | 33.77 | 3.90 | 26.20 | 182 | 0.57 |
| 284 | 7.75 | 34.04 | 2.67 | 147 | 250 | 8.17 | 33.97 | 3.11 | 26.46 | 158 | 0.66 |
| 378 | 6.68 | 34.14 | 1.70 | 125 | 300 | 7.56 | 34.06 | 2.49 | 26.62 | 143 | 0.73 |
| 482 | 5.98 | 34.22 | 0.71 | 110 | 400 | 6.47 | 34.16 | 1.47 | 26.85 | 121 | 0.87 |
| 590 | 5.54 | 34.33 | 0.40 | 97 | 500 | 5.89 | 34.24 | 0.62 | 26.99 | 108 | 0.99 |
| | | | | | 600 | (5.52) | (34.34) | (0.40) | (27.11) | (96) | (1.10) |
| 93.80 | E. W. SCRIPPS; May 15, 1952; 1738 GCT; 31°05.5'N, 120°58'W; sounding, 2030 fm; wind, 290°, force 5; weather, cloudy; sea, very rough; wire angle, 28°. | | | | | | | | | | |
| 0 | 15.50 | 33.40 | 4.99u | 330 | 0 | 15.50 | 33.40 | | 24.65 | 330 | 0.00 |
| 8 | 15.48 | 33.42 | 5.87 | 328 | 10 | 15.5 | 33.42 | 5.95 | 24.67 | 329 | 0.03 |
| 26 | - | 33.42 | 6.19 | | 20 | 15.5 | 33.42 | 6.15 | 24.67 | 329 | 0.07 |
| 53 | 15.45 | 33.42 | 5.87 | 327 | 30 | 15.5 | 33.42 | 6.19 | 24.67 | 329 | 0.10 |
| 79 | - | 33.42 | 5.71 | | 50 | 15.5 | 33.42 | 5.95 | 24.67 | 329 | 0.16 |
| 105 | 14.59 | 33.44 | 5.74 | 308 | 75 | 15.4 | 33.42 | 5.72 | 24.69 | 326 | 0.25 |
| 158 | 10.18 | 33.35 | 5.72 | 234 | 100 | 14.7 | 33.44 | 5.72 | 24.86 | 310 | 0.33 |
| 211 | 8.76 | 33.78 | 3.80 | 180 | 150 | 10.41 | 33.35 | 5.74 | 25.62 | 238 | 0.47 |
| | | | | | 200 | 9.03 | 33.63 | 4.79 | 26.06 | 196 | 0.58 |
| 97.30 | E. W. SCRIPPS; May 17, 1952; 1426 GCT; 32°15'N, 117°08.5'W; sounding, 60 fm; wind, 270°, force 1; weather, overcast; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 0 | 15.94 | 33.38 | 6.27 | 341 | 0 | 15.94 | 33.38 | 6.27 | 24.54 | 341 | 0.00 |
| 10 | 11.46 | 33.39 | 5.71 | 253 | 10 | 11.46 | 33.39 | 5.71 | 25.46 | 253 | 0.03 |
| 20 | 10.32 | 33.53 | 4.76 | 223 | 20 | 10.32 | 33.53 | 4.76 | 25.77 | 223 | 0.05 |
| 30 | 9.85 | 33.71 | 3.33 | 202 | 30 | 9.85 | 33.71 | 3.33 | 25.99 | 202 | 0.07 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| E. W. SCRIPPS; May 17, 1952; 0828 GCT; 31°55.5'N, 117°50'W; sounding, 650 fm; wind, 300°, force 1; weather, partly cloudy; sea, moderate; wire angle, 08°. | | | | | | | | | | | 97.40 |
| 0 | 15.75 | 33.35 | 5.89 | 339 | 0 | 15.75 | 33.35 | 5.89 | 24.56 | 339 | 0.00 |
| 10 | 15.64 | 33.35 | 6.00 | 337 | 10 | 15.64 | 33.35 | 6.00 | 24.58 | 337 | 0.03 |
| 25 | - | 33.31 | 6.09 | | 20 | 15.4 | 33.34 | 6.08 | 24.63 | 332 | 0.07 |
| 49 | 11.54 | 33.24 | 5.42 | 265 | 30 | 13.9 | 33.26 | 6.08 | 24.88 | 308 | 0.10 |
| 74 | - | 33.31 | 4.53 | | 50 | 11.4 | 33.24 | 5.40 | 25.35 | 263 | 0.16 |
| 98 | 9.41 | 33.62 | 3.71 | 202 | 75 | 10.0 | 33.31 | 4.53 | 25.65 | 234 | 0.22 |
| 152 | 8.70 | 33.93 | 2.85 | 168 | 100 | 9.37 | 33.64 | 3.65 | 26.02 | 200 | 0.27 |
| 200 | 8.28 | 34.13 | 1.92 | 147 | 150 | 8.72 | 33.91 | 2.87 | 26.33 | 170 | 0.37 |
| 249 | 7.98 | 34.18 | 1.63 | 139 | 200 | 8.28 | 34.13 | 1.92 | 26.57 | 147 | 0.45 |
| 298 | 7.42 | 34.22 | 1.29 | 129 | 250 | 7.98 | 34.18 | 1.62 | 26.65 | 139 | 0.52 |
| 400 | 6.58 | 34.29 | 0.67 | 113 | 300 | 7.41 | 34.22 | 1.28 | 26.77 | 129 | 0.59 |
| 498 | 5.98 | 34.31 | 0.40 | 104 | 400 | 6.58 | 34.29 | 0.67 | 26.94 | 113 | 0.72 |
| 603 | 5.40 | - | 0.32 | | 500 | 5.97 | 34.31 | 0.40 | 27.03 | 104 | 0.83 |
| | | | | | 600 | 5.42 | | 0.33 | | | |
| E. W. SCRIPPS; May 17, 1952; 0155 GCT; 31°35.5'N, 118°30.5'W; sounding, 1250 fm; wind, 290°, force 3; weather, overcast; sea, rough; wire angle, 19°. | | | | | | | | | | | 97.50 |
| 0 | 14.60 | 33.28 | 6.00 | 320 | 0 | 14.60 | 33.28 | 6.00 | 24.75 | 320 | 0.00 |
| 9 | 14.56 | 33.26 | 5.93 | 321 | 10 | 14.5 | 33.26 | 5.92 | 24.76 | 320 | 0.03 |
| 23 | - | 33.28 | 5.92 | | 20 | 14.5 | 33.28 | 5.92 | 24.77 | 318 | 0.06 |
| 52 | 12.58 | 33.15 | 5.97 | 291 | 30 | 14.3 | 33.27 | 5.92 | 24.81 | 315 | 0.10 |
| 76 | - | 33.19 | 5.94 | | 50 | 12.7 | 33.15 | 5.95 | 25.04 | 293 | 0.16 |
| 103 | 9.75 | 33.40 | 5.23 | 224 | 75 | 10.9 | 33.19 | 5.94 | 25.41 | 258 | 0.23 |
| 153 | 8.99 | 33.97 | 3.42 | 170 | 100 | 9.8 | 33.35 | 5.44 | 25.72 | 228 | 0.29 |
| 205 | 8.16 | 34.05 | 3.11 | 152 | 150 | 9.02 | 33.96 | 3.45 | 26.32 | 171 | 0.39 |
| 261 | 7.80 | 34.14 | 2.43 | 140 | 200 | 8.21 | 34.04 | 3.15 | 26.51 | 153 | 0.47 |
| 308 | 7.44 | 34.20 | 1.48 | 131 | 250 | 7.87 | 34.12 | 2.61 | 26.62 | 142 | 0.55 |
| 416 | 6.80 | 34.29 | 0.70 | 115 | 300 | 7.50 | 34.19 | 1.62 | 26.73 | 132 | 0.62 |
| 522 | 6.03 | 34.34 | 0.40 | 102 | 400 | 6.88 | 34.28 | 0.77 | 26.89 | 117 | 0.75 |
| 631 | 5.38 | 34.38 | 0.27 | 91 | 500 | 6.21 | 34.33 | 0.45 | 27.02 | 105 | 0.86 |
| | | | | | 600 | 5.54 | 34.37 | 0.30 | 27.13 | 94 | 0.97 |
| E. W. SCRIPPS; May 16, 1952; 1917 GCT; 31°16'N, 119°10.5'W; sounding, 1900 fm; wind, 270°, force 4; weather, overcast; sea, very rough; wire angle, 24°. | | | | | | | | | | | 97.60 |
| 0 | 14.84 | 33.24 | 5.97 | 328 | 0 | 14.84 | 33.24 | 5.97 | 24.67 | 328 | 0.00 |
| 8 | 14.83 | 33.22 | 5.90 | 329 | 10 | 14.8 | 33.22 | 5.90 | 24.66 | 329 | 0.03 |
| 22 | - | 33.22 | 5.89 | | 20 | 14.8 | 33.22 | 5.90 | 24.66 | 329 | 0.07 |
| 51 | 14.36 | 33.22 | 6.13 | 320 | 30 | 14.8 | 33.22 | 5.93 | 24.66 | 329 | 0.10 |
| 73 | - | 33.19 | 6.08 | | 50 | 14.4 | 33.22 | 6.13 | 24.75 | 320 | 0.16 |
| 100 | 10.17 | 33.19 | 5.12 | 246 | 75 | 12.7 | 33.19 | 6.05 | 25.07 | 290 | 0.24 |
| 148 | 9.29 | 33.84 | 3.23 | 184 | 100 | 10.17 | 33.19 | 5.12 | 25.53 | 246 | 0.31 |
| 198 | 8.78 | 34.05 | 2.56 | 161 | 150 | 9.28 | 33.88 | 3.18 | 26.22 | 181 | 0.42 |
| 252 | 8.11 | 34.09 | 2.06 | 148 | 200 | 8.76 | 34.05 | 2.54 | 26.43 | 160 | 0.50 |
| 298 | 7.64 | 34.20 | 1.43 | 133 | 250 | 8.17 | 34.09 | 2.06 | 26.56 | 149 | 0.58 |
| 405 | 6.78 | 34.27 | 0.75 | 117 | 300 | 7.62 | 34.20 | 1.42 | 26.72 | 133 | 0.66 |
| 509 | 6.07 | 34.31 | 0.45 | 105 | 400 | 6.82 | 34.27 | 0.77 | 26.89 | 117 | 0.79 |
| 616 | 5.39 | 34.34 | 0.33 | 95 | 500 | 6.13 | 34.31 | 0.47 | 27.01 | 105 | 0.90 |
| | | | | | 600 | 5.48 | 34.34 | 0.34 | 27.12 | 96 | 1.01 |
| E. W. SCRIPPS; May 16, 1952; 1312 GCT; 30°57'N, 119°47.5'W; sounding, 1900 fm; wind, 270°, force 4; weather, partly cloudy; sea, rough; wire angle, 17°. | | | | | | | | | | | 97.70 |
| 0 | 14.76 | 33.22 | 6.04 | 328 | 0 | 14.76 | 33.22 | 6.04 | 24.67 | 328 | 0.00 |
| 9 | 14.72 | 33.21 | 5.82 | 328 | 10 | 14.7 | 33.21 | 5.82 | 24.68 | 327 | 0.03 |
| 23 | - | 33.22 | 5.91 | | 20 | 14.7 | 33.22 | 5.90 | 24.69 | 327 | 0.07 |
| 51 | 14.20 | 33.19 | 5.96 | 319 | 30 | 14.7 | 33.22 | 5.92 | 24.69 | 327 | 0.10 |
| 76 | - | 33.22 | 5.97 | | 50 | 14.2 | 33.19 | 5.95 | 24.77 | 319 | 0.16 |
| 104 | 10.98 | 33.18 | 5.32 | 260 | 75 | 13.3 | 33.22 | 5.97 | 24.98 | 299 | 0.24 |
| 156 | 9.15 | 33.55 | 3.97 | 203 | 100 | 11.2 | 33.18 | 5.46 | 25.34 | 264 | 0.31 |
| 207 | 8.56 | 33.96 | 3.02 | 164 | 150 | 9.32 | 33.44 | 4.10 | 25.87 | 214 | 0.43 |
| | | | | | 200 | 8.62 | 33.94 | 3.14 | 26.37 | 167 | 0.53 |

SIO

CCOFI
5205

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

97.80 E. W. SCRIPPS; May 16, 1952; 0650 GCT; 30°37'N, 120°29'W; sounding, 2050 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.29 | 33.56 | 5.78 | 335 | 0 | 16.29 | 33.56 | 5.78 | 24.60 | 335 | 0.00 |
| 10 | 16.26 | 33.53 | 5.66 | 337 | 10 | 16.26 | 33.53 | 5.66 | 24.58 | 337 | 0.03 |
| 25 | - | 33.55 | 5.46 | | 20 | 16.2 | 33.54 | 5.47 | 24.60 | 335 | 0.07 |
| 55 | 16.08 | 33.51 | 6.13 | 334 | 30 | 16.2 | 33.55 | 5.47 | 24.61 | 334 | 0.10 |
| 80 | - | 33.40 | 5.75 | | 50 | 16.1 | 33.52 | 6.07 | 24.61 | 334 | 0.17 |
| 109 | 11.81 | 33.22 | 5.49 | 272 | 75 | 15.6 | 33.44 | 5.90 | 24.66 | 329 | 0.25 |
| 163 | 9.46 | 33.69 | 3.68 | 198 | 100 | 12.6 | 33.24 | 5.57 | 25.13 | 284 | 0.33 |
| 215 | 9.04 | 34.04 | 3.80 | 165 | 150 | 9.72 | 33.57 | 3.78 | 25.90 | 211 | 0.45 |
| | | | | | 200 | 9.32 | 34.00 | 3.74 | 26.30 | 173 | 0.55 |

97.90 E. W. SCRIPPS; May 16, 1952; 0028 GCT; 30°16.5'N, 121°11.5'W; sounding, 2100 fm; wind, 290°, force 4; weather, cloudy; sea, very rough; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.44 | 33.53 | 5.90 | 341 | 0 | 16.44 | 33.53 | 5.70 | 24.54 | 341 | 0.00 |
| 9 | 16.42 | 33.53 | 5.44 | 340 | 10 | 16.4 | 33.53 | 5.44 | 24.55 | 340 | 0.03 |
| 23 | - | 33.53 | 5.56 | | 20 | 16.4 | 33.53 | 5.54 | 24.55 | 340 | 0.07 |
| 51 | 16.19 | 33.51 | 5.57 | 337 | 30 | 16.3 | 33.53 | 5.57 | 24.57 | 338 | 0.10 |
| 74 | - | 33.35 | 5.61 | | 50 | 16.2 | 33.51 | 5.57 | 24.58 | 337 | 0.17 |
| 101 | 13.06 | 33.22 | 5.82 | 294 | 75 | 14.4 | 33.35 | 5.62 | 24.85 | 311 | 0.25 |
| 149 | 9.70 | 33.46 | 4.41 | 219 | 100 | 13.2 | 33.22 | 5.80 | 25.00 | 297 | 0.33 |
| | | | | | 150 | 9.7 | (33.48) | (4.38) | (25.84) | (217) | (0.46) |

100.29 PAOLINA-T; May 20, 1952; 0629 GCT; 31°42'N, 116°43.5'W; sounding, 85 fm; wind, 360°, force 2; weather, cloudy; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.78 | 33.60 | | 261 | 0 | 12.78 | 33.60 | | 25.37 | 261 | 0.00 |
| 10 | 10.56 | 33.68 | | 216 | 10 | 10.56 | 33.68 | | 25.85 | 216 | 0.02 |
| 19 | 10.29 | 33.73 | | 208 | 20 | 10.29 | 33.73 | | 25.93 | 208 | 0.05 |
| 30 | 10.00 | 33.80 | | 198 | 30 | 10.00 | 33.80 | | 26.04 | 198 | 0.07 |
| 50 | 10.10 | 33.87 | | 195 | 50 | 10.00 | 33.87 | | 26.07 | 195 | 0.10 |
| 75 | 9.84 | 33.91 | | 187 | 75 | 9.84 | 33.91 | | 26.15 | 187 | 0.15 |

100.30 PAOLINA-T; May 20, 1952; 0835 GCT; 31°41'N, 116°46.5'W; sounding, 228 fm; wind, 340°, force 1; weather, overcast; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.81 | 33.55 | | 265 | 0 | 12.81 | 33.55 | | 25.33 | 265 | 0.00 |
| 10 | 10.62 | 33.68 | | 217 | 10 | 10.62 | 33.68 | | 25.84 | 217 | 0.02 |
| 25 | 10.01 | 33.73 | | 203 | 20 | 10.11 | 33.72 | | 25.96 | 206 | 0.05 |
| 50 | 9.74 | 33.82 | | 193 | 30 | 9.94 | 33.74 | | 26.00 | 202 | 0.07 |
| 74 | 9.61 | 33.95 | | 181 | 50 | 9.74 | 33.82 | | 26.10 | 193 | 0.11 |
| 98 | 9.58 | 34.02 | | 175 | 75 | 9.61 | 33.95 | | 26.22 | 181 | 0.15 |
| 154 | 9.19 | 34.13 | | 161 | 100 | 9.56 | 34.03 | | 26.29 | 174 | 0.20 |
| 203 | 8.86 | 34.23 | | 149 | 150 | 9.22 | 34.12 | | 26.41 | 162 | 0.28 |
| 253 | 8.61 | 34.25 | | 143 | 200 | 8.88 | 34.23 | | 26.55 | 149 | 0.36 |
| 302 | 8.26 | 34.30 | | 135 | 250 | 8.65 | 34.25 | | 26.61 | 144 | 0.44 |
| 357 | 7.77 | 34.31 | | 127 | 300 | 8.28 | 34.30 | | 26.70 | 135 | 0.51 |

100.40 PAOLINA-T; May 20, 1952; 1449 GCT; 31°23'N, 117°26'W; sounding, 950 fm; wind, 360°, force 1; weather, overcast; sea, slight; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.20 | 33.28 | | 332 | 0 | 15.20 | 33.28 | | 24.62 | 332 | 0.00 |
| 10 | 15.38 | 33.28 | | 336 | 10 | 15.38 | 33.28 | | 24.58 | 336 | 0.03 |
| 25 | 15.06 | 33.26 | | 331 | 20 | 15.18 | 33.27 | | 24.62 | 333 | 0.07 |
| 50 | - | 33.17 | | | 30 | 15.04 | 33.24 | | 24.63 | 332 | 0.10 |
| 75 | 10.52 | 33.39 | | 237 | 50 | 14.80 | 33.17 | | 24.63 | 332 | 0.17 |
| 101 | - | 33.49 | | | 75 | 10.52 | 33.39 | | 25.63 | 237 | 0.24 |
| 157 | 9.08 | 33.98 | | 170 | 100 | 10.00 | 33.49 | | 25.79 | 221 | 0.30 |
| 209 | 8.55 | 34.07 | | 156 | 150 | 9.20 | 33.94 | | 26.28 | 175 | 0.40 |
| 261 | - | 34.18 | | | 200 | 8.65 | 34.06 | | 26.46 | 158 | 0.48 |
| 312 | 7.62 | 34.20 | | 133 | 250 | 8.19 | 34.17 | | 26.61 | 143 | 0.56 |
| 418 | 6.62 | 34.23 | | 118 | 300 | 7.76 | 34.20 | | 26.70 | 135 | 0.63 |
| 518 | 5.96 | 34.31 | | 103 | 400 | 6.78 | 34.22 | | 26.86 | 120 | 0.76 |
| 623 | 5.44 | 34.32 | | 97 | 500 | 6.07 | 34.30 | | 27.01 | 105 | 0.88 |
| 828 | 4.46 | 34.49 | | 73 | 600 | 5.56 | 34.32 | | 27.09 | 98 | 0.99 |
| 1030 | 3.79 | 34.52 | | 64 | 700 | 5.04 | 34.36 | | 27.19 | 89 | 1.09 |
| 1235 | 3.36 | 34.52 | | 60 | 800 | 4.58 | 34.48 | | 27.33 | 75 | 1.18 |
| | | | | | 1000 | 3.88 | 34.52 | | 27.44 | 65 | 1.34 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

PAOLINA-T; May 20, 1952; 2233 GCT; 31°05'N, 118°07'W; sounding, 950 fm; wind, 280°, force 2; weather, overcast; sea, moderate; wire angle, 16°. 100.50

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.82 | 33.33 | 342 | 0 | 15.82 | 33.33 | 24.53 | 342 | 0.00 |
| 9 | 15.76 | 33.33 | 341 | 10 | 15.76 | 33.33 | 24.54 | 341 | 0.03 |
| 24 | 15.57 | 33.33 | 337 | 20 | 15.62 | 33.33 | 24.57 | 338 | 0.07 |
| 49 | 13.93 | 33.30 | 305 | 30 | 15.57 | 33.33 | 24.58 | 337 | 0.10 |
| 72 | 11.76 | 33.33 | 263 | 50 | 13.70 | 33.30 | 24.96 | 301 | 0.17 |
| 95 | 10.29 | 33.48 | 227 | 75 | 11.47 | 33.33 | 25.41 | 257 | 0.24 |
| 147 | 9.19 | 33.91 | 177 | 100 | 10.10 | 33.54 | 25.82 | 219 | 0.30 |
| 193 | 8.82 | 34.07 | 160 | 150 | 9.14 | 33.92 | 26.27 | 176 | 0.40 |
| 239 | 8.62 | 34.25 | 144 | 200 | 8.79 | 34.09 | 26.46 | 158 | 0.48 |
| 286 | 7.88 | 34.22 | 135 | 250 | 8.50 | 34.24 | 26.62 | 143 | 0.56 |
| 388 | 7.14 | 34.29 | 120 | 300 | 7.74 | 34.23 | 26.73 | 132 | 0.63 |
| 485 | 6.31 | 34.33 | 106 | 400 | 7.04 | 34.30 | 26.88 | 118 | 0.76 |
| 589 | 5.60 | 34.36 | 95 | 500 | 6.21 | 34.33 | 27.02 | 105 | 0.88 |
| | | | | 600 | (5.54) | (34.36) | (27.13) | (95) | (0.98) |

PAOLINA-T; May 21, 1952; 0450 GCT; 30°46'N, 118°48'W; sounding, 1150 fm; wind, 270°, force 2; weather, overcast; sea, moderate; wire angle, 11°. 100.60

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.74 | 33.31 | 342 | 0 | 15.74 | 33.31 | 24.53 | 342 | 0.00 |
| 10 | 15.78 | 33.32 | 342 | 10 | 15.78 | 33.32 | 24.53 | 342 | 0.03 |
| 24 | 15.61 | 33.33 | 337 | 20 | 15.66 | 33.33 | 24.56 | 338 | 0.07 |
| 49 | - | 33.24 | | 30 | 15.5 | 33.33 | 24.60 | 335 | 0.10 |
| 73 | 11.69 | 33.30 | 264 | 50 | 15.1 | 33.24 | 24.62 | 333 | 0.17 |
| 97 | - | 33.44 | | 75 | 11.6 | 33.31 | 25.37 | 261 | 0.24 |
| 148 | 9.28 | 33.75 | 191 | 100 | 10.4 | 33.46 | 25.70 | 230 | 0.31 |
| 195 | 8.56 | 34.02 | 160 | 150 | 9.23 | 33.76 | 26.13 | 189 | 0.41 |
| 242 | 8.30 | 34.11 | 149 | 200 | 8.49 | 34.03 | 26.46 | 158 | 0.50 |
| 288 | 7.68 | 34.18 | 135 | 250 | 7.99 | 34.12 | 26.61 | 144 | 0.58 |
| 387 | 6.83 | 34.25 | 119 | 300 | 7.55 | 34.19 | 26.72 | 133 | 0.65 |
| 481 | 6.27 | 34.33 | 106 | 400 | 6.75 | 34.26 | 26.89 | 117 | 0.78 |
| 580 | 5.72 | 34.33 | 99 | 500 | 6.17 | 34.33 | 27.02 | 104 | 0.90 |
| 778 | 4.76 | 34.42 | 82 | 600 | 5.62 | 34.33 | 27.09 | 98 | 1.00 |
| 973 | 4.01 | 34.45 | 72 | 700 | 5.13 | 34.38 | 27.19 | 89 | 1.11 |
| 1176 | 3.49 | 34.51 | 62 | 800 | 4.66 | 34.42 | 27.28 | 81 | 1.20 |
| | | | | 1000 | 3.94 | 34.46 | 27.38 | 70 | 1.37 |

PAOLINA-T; May 21, 1952; 1153 GCT; 30°26'N, 119°17'W; sounding, 2000 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 12°. 100.70

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.88 | 33.30 | 345 | 0 | 15.88 | 33.30 | 24.49 | 345 | 0.00 |
| 10 | 16.10 | 33.30 | 350 | 10 | 16.10 | 33.30 | 24.44 | 350 | 0.03 |
| 24 | 16.07 | 33.38 | 344 | 20 | 16.10 | 33.36 | 24.49 | 346 | 0.07 |
| 48 | 15.92 | 33.37 | 341 | 30 | 16.03 | 33.38 | 24.52 | 343 | 0.10 |
| 73 | 15.67 | 33.44 | 331 | 50 | 15.93 | 33.37 | 24.53 | 341 | 0.17 |
| 98 | 13.61 | 33.30 | 299 | 75 | 15.55 | 33.44 | 24.67 | 328 | 0.26 |
| 148 | 10.22 | 33.48 | 225 | 100 | 13.37 | 33.30 | 25.02 | 294 | 0.34 |
| 196 | 9.16 | 33.84 | 182 | 150 | 10.15 | 33.49 | 25.77 | 224 | 0.47 |
| 242 | 8.39 | 34.04 | 156 | 200 | 9.08 | 33.87 | 26.24 | 179 | 0.57 |
| 289 | 7.85 | 34.07 | 146 | 250 | 8.31 | 34.05 | 26.50 | 154 | 0.65 |
| 389 | 6.96 | 34.13 | 129 | 300 | 7.74 | 34.07 | 26.60 | 144 | 0.73 |
| 486 | 6.33 | 34.23 | 114 | 400 | 6.89 | 34.14 | 26.78 | 128 | 0.87 |
| 590 | 5.74 | 34.31 | 101 | 500 | 6.27 | 34.24 | 26.94 | 112 | 1.00 |
| | | | | 600 | (5.69) | (34.31) | (27.07) | (100) | (1.11) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **100.80** | PAOLINA-T; May 21, 1952; 2030 GCT; 29°48.5'N, 120°12'W; sounding, 1600 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 09°. | | | | | | | | | | |
| 0 | 16.93 | 33.55 | | 350 | 0 | 16.93 | 33.55 | | 24.44 | 350 | 0.00 |
| 10 | 16.92 | 33.49 | | 354 | 10 | 16.92 | 33.49 | | 24.40 | 354 | 0.04 |
| 25 | 16.64 | 33.51 | | 347 | 20 | 16.70 | 33.51 | | 24.46 | 348 | 0.07 |
| 49 | - | 33.40 | | | 30 | 16.6 | 33.51 | | 24.49 | 346 | 0.11 |
| 74 | 14.69 | 33.26 | | 323 | 50 | 16.3 | 33.39 | | 24.46 | 348 | 0.17 |
| 98 | - | 33.24 | | | 75 | 14.7 | 33.26 | | 24.72 | 324 | 0.26 |
| 151 | 10.39 | 33.57 | | 221 | 100 | 13.2 | 33.24 | | 25.01 | 296 | 0.34 |
| 199 | 8.94 | 33.87 | | 176 | 150 | 10.4 | 33.57 | | 25.79 | 222 | 0.47 |
| 247 | 8.30 | 33.95 | | 161 | 200 | 8.94 | 33.87 | | 26.26 | 176 | 0.57 |
| 295 | 7.73 | 34.09 | | 143 | 250 | 8.23 | 33.95 | | 26.44 | 160 | 0.66 |
| 395 | 6.84 | 34.16 | | 126 | 300 | 7.68 | 34.09 | | 26.63 | 142 | 0.73 |
| 493 | 6.10 | 34.23 | | 111 | 400 | 6.81 | 34.17 | | 26.81 | 124 | 0.87 |
| | | | | | 500 | (6.06) | (34.23) | | (26.96) | (111) | (1.00) |
| **100.90** | PAOLINA-T; May 22, 1952; 0209 GCT; 29°40.5'N, 120°47'W; sounding, 2200 fm; wind, 290°, force 4; weather, cloudy; sea, rough; wire angle, 16°. | | | | | | | | | | |
| 0 | 16.74 | 33.33 | | 362 | 0 | 16.74 | 33.33 | | 24.32 | 362 | 0.00 |
| 10 | 16.62 | 33.31 | | 361 | 10 | 16.62 | 33.31 | | 24.33 | 361 | 0.04 |
| 24 | 16.26 | 33.33 | | 351 | 20 | 16.41 | 33.33 | | 24.39 | 355 | 0.07 |
| 48 | 15.12 | 33.22 | | 335 | 30 | 16.04 | 33.33 | | 24.48 | 347 | 0.11 |
| 72 | 13.09 | 33.12 | | 302 | 50 | 14.95 | 33.19 | | 24.61 | 334 | 0.18 |
| 96 | 11.56 | 33.12 | | 275 | 75 | 12.82 | 33.12 | | 24.99 | 297 | 0.25 |
| 149 | 9.52 | 33.42 | | 219 | 100 | 11.31 | 33.12 | | 25.28 | 270 | 0.33 |
| 196 | 8.66 | 33.86 | | 173 | 150 | 9.50 | 33.43 | | 25.83 | 218 | 0.45 |
| 243 | 8.19 | 33.98 | | 157 | 200 | 8.61 | 33.88 | | 26.32 | 171 | 0.55 |
| 291 | 7.58 | 34.02 | | 146 | 250 | 8.12 | 33.99 | | 26.48 | 156 | 0.63 |
| 392 | 6.68 | 34.14 | | 125 | 300 | 7.47 | 34.03 | | 26.61 | 144 | 0.71 |
| 489 | 6.08 | 34.27 | | 108 | 400 | 6.63 | 34.15 | | 26.82 | 124 | 0.85 |
| 592 | 5.42 | 34.33 | | 96 | 500 | 6.00 | 34.28 | | 27.01 | 106 | 0.97 |
| | | | | | 600 | (5.37) | (34.33) | | (27.12) | (95) | (1.08) |
| **103.30** | PAOLINA-T; May 24, 1952; 0446 GCT; 31°00'N, 116°25'W; sounding, 36 fm; wind, 350°, force 2; weather, overcast; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 0 | 13.50 | 33.77 | 7.36 | 262 | 0 | 13.50 | 33.77 | 7.36 | 25.36 | 262 | 0.00 |
| 10 | 12.79 | 33.71 | 7.39 | 253 | 10 | 12.79 | 33.71 | 7.39 | 25.46 | 253 | 0.03 |
| 19 | 10.71 | 33.77 | 3.91 | 212 | 20 | 10.70 | 33.77 | 3.85 | 25.89 | 212 | 0.05 |
| 30 | 10.18 | 33.77 | 3.19 | 203 | 30 | 10.18 | 33.77 | 3.19 | 25.98 | 203 | 0.07 |
| 40 | 10.14 | 33.75 | 2.94 | 204 | | | | | | | |
| **103.35** | PAOLINA-T; May 23, 1952; 2338 GCT; 30°37'N, 116°49'W; sounding, 1200 fm; wind, 290°, force 4; weather, overcast; sea, moderate; wire angle, 08°. | | | | | | | | | | |
| 0 | 15.52 | 33.35 | 5.89 | 334 | 0 | 15.52 | 33.35 | 5.89 | 24.61 | 334 | 0.00 |
| 10 | 15.43 | 33.39 | 5.98 | 329 | 10 | 15.43 | 33.39 | 5.98 | 24.66 | 329 | 0.03 |
| 25 | 14.57 | 33.37 | 6.00 | 313 | 20 | 15.06 | 33.39 | 6.00 | 24.74 | 322 | 0.07 |
| 50 | 10.89 | 33.31 | 5.02 | 249 | 30 | 14.00 | 33.34 | 5.96 | 24.93 | 304 | 0.10 |
| 74 | 9.81 | 33.68 | 3.94 | 204 | 50 | 10.89 | 33.31 | 5.02 | 25.50 | 249 | 0.15 |
| 98 | 9.50 | 33.78 | 3.59 | 192 | 75 | 9.79 | 33.68 | 3.93 | 25.98 | 204 | 0.21 |
| 152 | 9.07 | 34.16 | 2.40 | 157 | 100 | 9.48 | 33.79 | 3.56 | 26.11 | 191 | 0.26 |
| 201 | 8.69 | 34.22 | 1.78 | 147 | 150 | 9.09 | 34.15 | 2.43 | 26.46 | 158 | 0.35 |
| 250 | 8.27 | 34.31 | 1.12 | 134 | 200 | 8.70 | 34.22 | 1.81 | 26.58 | 147 | 0.43 |
| | | | | | 250 | 8.27 | 34.31 | 1.12 | 26.71 | 134 | 0.50 |
| **103.40** | PAOLINA-T; May 23, 1952; 2010 GCT; 30°29'N, 117°10'W; sounding, 1220 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 11°. | | | | | | | | | | |
| 0 | 15.11 | 33.40 | | 322 | 0 | 15.11 | 33.40 | | 24.74 | 322 | 0.00 |
| 10 | 14.89 | 33.40 | | 317 | 10 | 14.89 | 33.40 | | 24.78 | 317 | 0.03 |
| 25 | 11.14 | 33.58 | | 233 | 20 | 14.86 | 33.46 | | 24.84 | 312 | 0.06 |
| 49 | 9.69 | 33.87 | | 188 | 30 | 10.68 | 33.64 | | 25.79 | 221 | 0.09 |
| 73 | 9.38 | 34.02 | | 172 | 50 | 9.64 | 33.88 | | 26.16 | 187 | 0.13 |
| 97 | 9.12 | 34.11 | | 161 | 75 | 9.34 | 34.03 | | 26.32 | 171 | 0.18 |
| 151 | 8.78 | 34.16 | | 153 | 100 | 9.10 | 34.12 | | 26.43 | 160 | 0.22 |
| 199 | 8.48 | 34.20 | | 145 | 150 | 8.79 | 34.16 | | 26.51 | 153 | 0.30 |
| 248 | 8.04 | 34.27 | | 134 | 200 | 8.44 | 34.20 | | 26.60 | 145 | 0.37 |
| | | | | | 250 | (8.03) | (34.28) | | (26.72) | (133) | (0.44) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PAOLINA-T; May 23, 1952; 1244 GCT; 30°14'N, 117°50'W; sounding, 1600 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 06°. | | | | | | | | | | | 103.50 |
| 0 | 16.00 | 33.33 | 5.75 | 346 | 0 | 16.00 | 33.33 | 5.75 | 24.48 | 346 | 0.00 |
| 10 | 15.96 | 33.31 | 5.78 | 346 | 10 | 15.96 | 33.31 | 5.78 | 24.48 | 346 | 0.03 |
| 25 | 15.98 | 33.29 | 5.78 | 348 | 20 | 15.97 | 33.30 | 5.78 | 24.47 | 347 | 0.07 |
| 50 | 13.11 | 33.19 | 6.31 | 298 | 30 | 15.98 | 33.27 | 5.78 | 24.44 | 350 | 0.10 |
| 75 | 11.29 | 33.33 | 4.81 | 254 | 50 | 13.11 | 33.19 | 6.31 | 24.99 | 298 | 0.17 |
| 99 | 10.42 | 33.49 | 4.08 | 228 | 75 | 11.29 | 33.33 | 4.81 | 25.44 | 254 | 0.24 |
| 153 | 9.20 | 33.98 | 2.83 | 172 | 100 | 10.41 | 33.49 | 4.05 | 25.72 | 228 | 0.30 |
| 203 | 9.12 | 34.04 | 1.63 | 167 | 150 | 9.23 | 33.97 | 2.89 | 26.30 | 173 | 0.40 |
| 251 | 8.36 | 34.22 | 1.38 | 142 | 200 | 9.14 | 34.03 | 1.68 | 26.36 | 168 | 0.49 |
| 300 | 8.10 | 34.33 | 0.92 | 130 | 250 | 8.37 | 34.21 | 1.38 | 26.62 | 143 | 0.57 |
| 404 | 7.01 | 34.29 | 0.70 | 118 | 300 | 8.10 | 34.33 | 0.92 | 26.75 | 130 | 0.64 |
| 503 | 6.30 | 34.33 | 0.44 | 106 | 400 | 7.04 | 34.29 | 0.71 | 26.88 | 118 | 0.77 |
| 608 | 5.62 | 34.36 | 0.35 | 96 | 500 | 6.32 | 34.33 | 0.44 | 27.00 | 106 | 0.89 |
| | | | | | 600 | 5.67 | 34.36 | 0.35 | 27.11 | 96 | 1.00 |
| PAOLINA-T; May 23, 1952; 0506 GCT; 30°00'N, 118°28'W; sounding, 2000 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 20°. | | | | | | | | | | | 103.60 |
| 0 | 15.62 | 33.33 | 5.89 | 338 | 0 | 15.62 | 33.33 | 5.89 | 24.57 | 338 | 0.00 |
| 10 | 15.60 | 33.31 | 5.82 | 339 | 10 | 15.60 | 33.31 | 5.82 | 24.56 | 339 | 0.03 |
| 23 | 15.49 | 33.32 | 5.89 | 336 | 20 | 15.53 | 33.32 | 5.87 | 24.58 | 336 | 0.07 |
| 48 | 15.32 | 33.31 | 5.93 | 333 | 30 | 15.44 | 33.32 | 5.93 | 24.60 | 335 | 0.10 |
| 70 | 14.17 | 33.24 | 6.07 | 314 | 50 | 15.30 | 33.31 | 5.93 | 24.63 | 332 | 0.17 |
| 94 | 11.96 | 33.15 | 5.85 | 279 | 75 | 13.60 | 33.21 | 6.06 | 24.91 | 305 | 0.25 |
| 140 | 9.52 | 33.62 | 3.87 | 204 | 100 | 11.53 | 33.16 | 5.68 | 25.27 | 271 | 0.32 |
| 181 | 8.82 | 33.86 | 3.22 | 175 | 150 | 9.27 | 33.68 | 3.68 | 26.06 | 196 | 0.44 |
| 221 | 8.48 | 34.03 | 2.76 | 158 | 200 | 8.66 | 33.95 | 2.98 | 26.37 | 166 | 0.53 |
| 263 | 7.84 | 34.07 | 2.15 | 146 | 250 | 8.01 | 34.06 | 2.37 | 26.56 | 149 | 0.61 |
| 355 | 7.10 | 34.20 | 1.19 | 126 | 300 | 7.49 | 34.13 | 1.72 | 26.69 | 136 | 0.69 |
| 444 | 6.58 | 34.29 | 0.58 | 113 | 400 | 6.84 | 34.25 | 0.84 | 26.87 | 119 | 0.82 |
| 548 | 5.86 | 34.33 | 0.36 | 101 | 500 | 6.21 | 34.32 | 0.42 | 27.01 | 106 | 0.94 |
| PAOLINA-T; May 22, 1952; 2211 GCT; 29°45'N, 119°06.5'W; sounding, 1825 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 16°. | | | | | | | | | | | 103.70 |
| 0 | 16.55 | 33.51 | 5.64 | 345 | 0 | 16.55 | 33.51 | 5.64 | 24.50 | 345 | 0.00 |
| 9 | 16.52 | 33.51a) | 5.64 | 344 | 10 | 16.52 | 33.51 | 5.64 | 24.50 | 344 | 0.03 |
| 23 | 16.44 | 33.49 | 5.60 | 344 | 20 | 16.47 | 33.49 | 5.61 | 24.50 | 344 | 0.07 |
| 48 | 16.26 | 33.49 | 5.64 | 340 | 30 | 16.40 | 33.49 | 5.60 | 24.52 | 343 | 0.10 |
| 72 | 16.00 | 33.57 | 5.65 | 328 | 50 | 16.24 | 33.49 | 5.64 | 24.55 | 339 | 0.17 |
| 96 | 14.82 | 33.48 | 5.63 | 310 | 75 | 15.90 | 33.57 | 5.65 | 24.69 | 326 | 0.26 |
| 148 | 10.34 | 33.31 | 4.75 | 240 | 100 | 14.40 | 33.45 | 5.61 | 24.93 | 304 | 0.33 |
| 195 | 9.10 | 33.75 | 3.67 | 188 | 150 | 10.28 | 33.31 | 4.71 | 25.61 | 239 | 0.47 |
| 242 | 8.58 | 33.98 | 2.75 | 163 | 200 | 9.03 | 33.78 | 3.54 | 26.18 | 185 | 0.58 |
| | | | | | 250 | (8.49) | (33.99) | (2.70) | (26.43) | (161) | (0.67) |
| PAOLINA-T; May 22, 1952; 1529 GCT; 29°26'N, 119°42'W; sounding, 1950 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 05°. | | | | | | | | | | | 103.80 |
| 0 | 16.48 | 33.26 | 5.72 | 361 | 0 | 16.48 | 33.26 | 5.72 | 24.32 | 361 | 0.00 |
| 10 | 16.46 | 33.33 | 5.64 | 356 | 10 | 16.46 | 33.33 | 5.64 | 24.38 | 356 | 0.04 |
| 25 | 16.34 | 33.40 | 5.64 | 348 | 20 | 16.41 | 33.40 | 5.64 | 24.45 | 350 | 0.07 |
| 50 | 15.11 | 33.21 | 5.97 | 336 | 30 | 16.16 | 33.39 | 5.66 | 24.49 | 345 | 0.11 |
| 75 | 13.64 | 33.21 | 6.12 | 306 | 50 | 15.11 | 33.21 | 5.97 | 24.59 | 336 | 0.17 |
| 99 | 12.31 | 33.19 | 5.85 | 283 | 75 | 13.64 | 33.21 | 6.12 | 24.90 | 306 | 0.25 |
| 153 | 9.62 | 33.48 | 4.41 | 216 | 100 | 12.23 | 33.19 | 5.83 | 25.16 | 281 | 0.33 |
| 203 | 8.59 | 33.77 | 3.54 | 179 | 150 | 9.75 | 33.46 | 4.51 | 25.81 | 219 | 0.46 |
| 251 | 8.21 | 34.00 | 3.23 | 156 | 200 | 8.64 | 33.76 | 3.58 | 26.23 | 180 | 0.56 |
| 300 | 7.53 | 34.02 | 2.38 | 145 | 250 | 8.23 | 34.00 | 3.26 | 26.48 | 156 | 0.64 |
| 405 | 6.84 | 34.14 | 1.20 | 127 | 300 | 7.53 | 34.02 | 2.38 | 26.59 | 145 | 0.72 |
| 504 | 6.48 | 34.29 | 0.52 | 111 | 400 | 6.86 | 34.13 | 1.25 | 26.77 | 128 | 0.86 |
| 609 | 5.47 | 34.31 | 0.41 | 98 | 500 | 6.51 | 34.28 | 0.53 | 26.94 | 112 | 0.99 |
| | | | | | 600 | 5.57 | 34.31 | 0.41 | 27.08 | 99 | 1.10 |

a) Loose bottle cap; value falls on property curve.

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

103.90 PAOLINA-T; May 22, 1952; 0855 GCT; 29°06'N, 120°25'W; sounding, 1900 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 27°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.62 | 33.34 | 5.78 | 359 | 0 | 16.62 | 33.34 | 5.78 | 24.35 | 359 | 0.00 |
| 8 | 16.57 | 33.34 | 5.75 | 357 | 10 | 16.53 | 33.34 | 5.75 | 24.37 | 357 | 0.04 |
| 22 | 16.20 | 33.33 | 5.84 | 350 | 20 | 16.25 | 33.33 | 5.84 | 24.43 | 351 | 0.07 |
| 44 | 15.12 | 33.33 | 5.89 | 327 | 30 | 15.79 | 33.33 | 5.86 | 24.53 | 341 | 0.11 |
| 67 | 14.96 | 33.31 | 5.99 | 325 | 50 | 15.07 | 33.33 | 5.92 | 24.69 | 326 | 0.17 |
| 87 | 14.71 | 33.33 | 5.99 | 319 | 75 | 14.86 | 33.32 | 5.99 | 24.73 | 323 | 0.25 |
| 133 | 11.10 | 33.17 | 5.40 | 263 | 100 | 14.00 | 33.31 | 5.93 | 24.90 | 306 | 0.33 |
| 175 | 9.44 | 33.55 | 4.38 | 208 | 150 | 10.35 | 33.28 | 4.92 | 25.57 | 242 | 0.47 |
| 215 | 8.58 | 33.86 | 3.66 | 172 | 200 | 8.81 | 33.76 | 3.92 | 26.20 | 183 | 0.58 |
| 257 | 8.19 | 33.98 | 3.03 | 157 | 250 | 8.27 | 33.96 | 3.12 | 26.44 | 160 | 0.67 |
| 348 | 6.97 | 34.11 | 1.59 | 131 | 300 | 7.62 | 34.05 | 2.19 | 26.60 | 144 | 0.75 |
| 440 | 6.26 | 34.18 | 0.98 | 117 | 400 | 6.49 | 34.15 | 1.21 | 26.84 | 122 | 0.88 |
| 543 | 5.84 | 34.30 | 0.55 | 103 | 500 | 6.01 | 34.25 | 0.67 | 26.98 | 109 | 1.01 |

107.32 PAOLINA-T; May 24, 1952; 0946 GCT; 30°26'N, 116°11'W; sounding, 200 fm; wind, 340°, force 2; weather, fog; sea, moderate; wire angle, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.91 | 33.69 | | 276 | 0 | 13.91 | 33.69 | | 25.21 | 276 | 0.00 |
| 10 | 13.81 | 33.69 | | 274 | 10 | 13.81 | 33.69 | | 25.23 | 274 | 0.03 |
| 25 | 11.06 | 33.53 | | 236 | 20 | 11.70 | 33.57 | | 25.56 | 244 | 0.05 |
| 49 | 10.13 | 33.66 | | 211 | 30 | 10.77 | 33.53 | | 25.69 | 231 | 0.08 |
| 74 | 9.62 | 33.87 | | 187 | 50 | 10.11 | 33.68 | | 25.92 | 209 | 0.12 |
| 99 | 9.46 | 33.91 | | 181 | 75 | 9.61 | 33.87 | | 26.16 | 187 | 0.17 |
| 153 | 9.48 | 34.14 | | 165 | 100 | 9.47 | 33.91 | | 26.21 | 182 | 0.22 |
| 202 | 9.18 | 34.21 | | 155 | 150 | 9.48 | 34.13 | | 26.38 | 165 | 0.31 |
| 252 | 8.58 | 34.27 | | 141 | 200 | 9.19 | 34.21 | | 26.49 | 155 | 0.39 |
| 301 | 8.23 | 34.31 | | 133 | 250 | 8.58 | 34.27 | | 26.63 | 141 | 0.46 |
| | | | | | 300 | 8.24 | 34.31 | | 26.72 | 134 | 0.54 |

107.35 PAOLINA-T; May 24, 1952; 1226 GCT; 30°20'N, 116°23'W; sounding, 1000 fm; wind, 340°, force 3; weather, fog; sea, rough; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.70 | 33.39 | | 314 | 0 | 14.70 | 33.39 | | 24.82 | 314 | 0.00 |
| 9 | 14.82 | 33.39 | | 317 | 10 | 14.82 | 33.39 | | 24.79 | 317 | 0.03 |
| 24 | 13.09 | 33.39 | | 282 | 20 | 14.00 | 33.39 | | 24.96 | 300 | 0.06 |
| 48 | 10.95 | 33.48 | | 237 | 30 | 12.43 | 33.39 | | 25.28 | 270 | 0.09 |
| 74 | 9.90 | 33.75 | | 200 | 50 | 10.84 | 33.50 | | 25.66 | 234 | 0.14 |
| 98 | 9.62 | 33.91 | | 184 | 75 | 9.88 | 33.75 | | 26.02 | 200 | 0.20 |
| 152 | 9.02 | 34.07 | | 163 | 100 | 9.60 | 33.92 | | 26.20 | 183 | 0.24 |
| 199 | 8.80 | 34.25 | | 146 | 150 | 9.02 | 34.07 | | 26.41 | 163 | 0.33 |
| 247 | 8.36 | 34.20 | | 143 | 200 | 8.79 | 34.25 | | 26.58 | 146 | 0.41 |
| 297 | 8.02 | 34.31 | | 130 | 250 | 8.33 | 34.20 | | 26.62 | 143 | 0.49 |
| 399 | 7.37 | 34.32 | | 121 | 300 | 7.99 | 34.31 | | 26.75 | 130 | 0.56 |
| 498 | 6.74 | 34.34 | | 111 | 400 | 7.35 | 34.32 | | 26.86 | 120 | 0.69 |
| 603 | 5.84 | 34.35 | | 99 | 500 | 6.72 | 34.34 | | 26.96 | 111 | 0.81 |
| | | | | | 600 | 5.86 | 34.35 | | 27.08 | 99 | 0.92 |

107.40 PAOLINA-T; May 24, 1952; 1613 GCT; 30°11'N, 117°43.5'W; sounding, 1600 fm; wind, 320°, force 3; weather, overcast; sea, slight; wire angle, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.02 | 33.35 | | 345 | 0 | 16.02 | 33.35 | | 24.50 | 345 | 0.00 |
| 10 | 16.11 | 33.35 | | 347 | 10 | 16.11 | 33.35 | | 24.48 | 347 | 0.03 |
| 25 | 15.90 | 33.35 | | 342 | 20 | 15.92 | 33.35 | | 24.52 | 343 | 0.07 |
| 49 | 12.12 | 33.30 | | 271 | 30 | 15.89 | 33.35 | | 24.52 | 342 | 0.10 |
| 74 | 10.19 | 33.46 | | 226 | 50 | 11.85 | 33.30 | | 25.32 | 266 | 0.16 |
| 99 | 9.50 | 33.69 | | 198 | 75 | 10.16 | 33.46 | | 25.74 | 226 | 0.23 |
| 150 | 9.20 | 34.04 | | 168 | 100 | 9.48 | 33.70 | | 26.04 | 197 | 0.28 |
| 196 | 8.41 | 34.18 | | 146 | 150 | 9.20 | 34.04 | | 26.36 | 168 | 0.37 |
| 242 | 8.12 | 34.25 | | 136 | 200 | 8.38 | 34.19 | | 26.60 | 144 | 0.45 |
| | | | | | 250 | (8.05) | (34.25) | | (26.70) | (135) | (0.52) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| PAOLINA-T; May 24, 1952; 2236 GCT; 29°51'N, 117°21'W; sounding, 1175 fm; wind, 280°, force 2; weather, overcast; sea, moderate; wire angle, 16°. | | | | | | | | | | | 107.50 |
| 0 | 16.42 | 33.35 | | 353 | 0 | 16.42 | 33.35 | | 24.40 | 353 | 0.00 |
| 9 | 16.42 | 33.35 | | 353 | 10 | 16.42 | 33.35 | | 24.40 | 353 | 0.04 |
| 24 | 15.98 | 33.31 | | 347 | 20 | 16.01 | 33.32 | | 24.47 | 347 | 0.07 |
| 48 | 11.80 | 33.21 | | 272 | 30 | 15.92 | 33.31 | | 24.49 | 345 | 0.11 |
| 72 | 10.47 | 33.21 | | 249 | 50 | 11.59 | 33.21 | | 25.30 | 268 | 0.17 |
| 95 | 9.88 | 33.48 | | 220 | 75 | 10.39 | 33.21 | | 25.51 | 248 | 0.23 |
| 145 | 8.92 | 33.87 | | 176 | 100 | 9.75 | 33.57 | | 25.90 | 211 | 0.29 |
| 191 | 8.38 | 34.00 | | 159 | 150 | 8.85 | 33.88 | | 26.29 | 174 | 0.39 |
| 237 | 8.03 | 34.11 | | 145 | 200 | 8.30 | 34.02 | | 26.48 | 156 | 0.47 |
| 283 | 7.54 | 34.13 | | 137 | 250 | 7.90 | 34.12 | | 26.62 | 143 | 0.55 |
| 381 | 6.62 | 34.23 | | 118 | 300 | 7.35 | 34.14 | | 26.71 | 134 | 0.62 |
| 478 | 6.08 | 34.29 | | 106 | 400 | 6.50 | 34.24 | | 26.91 | 115 | 0.75 |
| 583 | 5.42 | 34.31 | | 97 | 500 | 5.95 | 34.30 | | 27.03 | 104 | 0.86 |
| | | | | | 600 | (5.30) | (34.31) | | (27.12) | (96) | (0.97) |
| PAOLINA-T; May 25, 1952; 0449 GCT; 29°31'N, 118°00'W; sounding, 2000 fm; wind, 350°, force 3; weather, overcast; sea, moderate; wire angle, 26°. | | | | | | | | | | | 107.60 |
| 0 | 15.67 | 33.26 | | 344 | 0 | 15.67 | 33.26 | | 24.51 | 344 | 0.00 |
| 9 | 15.69 | 33.22 | | 347 | 10 | 15.68 | 33.22 | | 24.47 | 347 | 0.03 |
| 23 | 15.61 | 33.24 | | 344 | 20 | 15.63 | 33.23 | | 24.49 | 345 | 0.07 |
| 44 | 15.38 | 33.26 | | 338 | 30 | 15.55 | 33.25 | | 24.52 | 342 | 0.10 |
| 66 | 15.53 | 33.39 | | 331 | 50 | 15.45 | 33.27 | | 24.56 | 338 | 0.17 |
| 87 | 14.28 | 33.37 | | 307 | 75 | 15.05 | 33.38 | | 24.73 | 322 | 0.25 |
| 132 | 11.02 | 33.46 | | 240 | 100 | 13.31 | 33.39 | | 25.11 | 287 | 0.33 |
| 172 | 9.44 | 33.64 | | 201 | 150 | 10.15 | 33.53 | | 25.80 | 221 | 0.46 |
| 214 | 8.76 | 33.95 | | 168 | 200 | 8.93 | 33.88 | | 26.27 | 176 | 0.56 |
| 257 | 8.09 | 34.04 | | 151 | 250 | 8.17 | 34.03 | | 26.51 | 153 | 0.64 |
| 349 | 7.47 | 34.16 | | 134 | 300 | 7.80 | 34.10 | | 26.62 | 143 | 0.72 |
| 441 | 6.69 | 34.23 | | 118 | 400 | 7.03 | 34.20 | | 26.81 | 125 | 0.86 |
| 541 | 5.98 | 34.29 | | 105 | 500 | 6.26 | 34.27 | | 26.96 | 110 | 0.98 |
| PAOLINA-T; May 26, 1952; 0059 GCT; 29°11'N, 118°43'W; sounding, 1900 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 10°. | | | | | | | | | | | 107.70 |
| 0 | 16.75 | 33.49 | | 350 | 0 | 16.75 | 33.49 | | 24.44 | 350 | 0.00 |
| 10 | 16.79 | 33.49 | | 351 | 10 | 16.79 | 33.49 | | 24.43 | 351 | 0.04 |
| 25 | 16.63 | 33.49 | | 348 | 20 | 16.71 | 33.49 | | 24.44 | 350 | 0.07 |
| 49 | 16.26 | 33.53 | | 337 | 30 | 16.57 | 33.49 | | 24.48 | 346 | 0.11 |
| 73 | 15.59 | 33.49 | | 325 | 50 | 16.24 | 33.53 | | 24.58 | 336 | 0.17 |
| 98 | 14.44 | 33.39 | | 309 | 75 | 15.54 | 33.48 | | 24.70 | 325 | 0.26 |
| 151 | 10.65 | 33.39 | | 239 | 100 | 14.19 | 33.38 | | 24.92 | 305 | 0.34 |
| 199 | 8.96 | 33.71 | | 189 | 150 | 10.70 | 33.39 | | 25.60 | 240 | 0.47 |
| 247 | 8.36 | 33.98 | | 160 | 200 | 8.94 | 33.72 | | 26.15 | 188 | 0.58 |
| 295 | 7.74 | 34.07 | | 144 | 250 | 8.32 | 33.99 | | 26.45 | 158 | 0.67 |
| 398 | 6.72 | 34.18 | | 123 | 300 | 7.68 | 34.07 | | 26.61 | 143 | 0.75 |
| 497 | 6.04 | 34.27 | | 107 | 400 | 6.70 | 34.18 | | 26.84 | 122 | 0.89 |
| 601 | 5.61 | 34.34 | | 97 | 500 | 6.02 | 34.27 | | 27.00 | 107 | 1.01 |
| | | | | | 600 | 5.62 | 34.34 | | 27.10 | 97 | 1.12 |
| PAOLINA-T; May 26, 1952; 0512 GCT; 28°52.5'N, 119°20.5'W; sounding, 1950 fm; wind, 340°, force 3; weather, overcast; sea, moderate; wire angle, 15°. | | | | | | | | | | | 107.80 |
| 0 | 16.82 | 33.40 | | 359 | 0 | 16.82 | 33.40 | | 24.35 | 359 | 0.00 |
| 10 | 16.80 | 33.37 | | 360 | 10 | 16.80 | 33.37 | | 24.33 | 360 | 0.04 |
| 24 | 16.85 | 33.39 | | 360 | 20 | 16.83 | 33.39 | | 24.34 | 360 | 0.07 |
| 48 | 15.14 | 33.30 | | 330 | 30 | 16.80 | 33.38 | | 24.34 | 360 | 0.11 |
| 72 | 15.04 | 33.31 | | 327 | 50 | 15.13 | 33.30 | | 24.65 | 330 | 0.18 |
| 95 | 14.42 | 33.28 | | 317 | 75 | 15.02 | 33.31 | | 24.69 | 327 | 0.26 |
| 145 | 10.28 | 33.28 | | 241 | 100 | 13.55 | 33.27 | | 24.96 | 300 | 0.34 |
| 192 | 9.34 | 33.71 | | 194 | 150 | 10.16 | 33.29 | | 25.61 | 238 | 0.47 |
| 237 | 8.61 | 33.98 | | 163 | 200 | 9.18 | 33.78 | | 26.16 | 187 | 0.58 |
| 283 | 8.08 | 34.09 | | 148 | 250 | 8.43 | 34.02 | | 26.46 | 158 | 0.67 |
| 382 | 7.29 | 34.20 | | 129 | 300 | 7.92 | 34.11 | | 26.61 | 144 | 0.75 |
| 479 | 6.63 | 34.29 | | 113 | 400 | 7.16 | 34.22 | | 26.80 | 125 | 0.89 |
| 584 | 5.64 | 34.29 | | 101 | 500 | 6.46 | 34.29 | | 26.95 | 111 | 1.01 |
| | | | | | 600 | (5.48) | (34.29) | | (27.08) | (99) | (1.13) |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

110.33 SPENCER F. BAIRD; May 25, 1952; 1420 GCT; 29°50'N, 115°53.5'W; sounding, 80 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.93 | 33.46 | 6.02 | 294 | 0 | 13.93 | 33.46 | 6.02 | 25.03 | 294 | 0.00 |
| 9 | 13.90 | 33.46 | 5.99 | 293 | 10 | 13.89 | 33.46 | 5.97 | 25.04 | 293 | 0.03 |
| 19 | 12.10 | 33.46 | 5.40 | 259 | 20 | 12.05 | 33.46 | 5.30 | 25.40 | 258 | 0.06 |
| 29 | 10.74 | 33.53 | 3.99 | 230 | 30 | 10.72 | 33.53 | 3.93 | 25.70 | 230 | 0.08 |
| 48 | 9.95 | 33.75 | 3.32 | 201 | 50 | 9.88 | 33.77 | 3.28 | 26.03 | 198 | 0.12 |
| 63 | 9.62 | 33.89 | 3.16 | 185 | 75 | (9.64) | (33.93) | (2.80) | (26.20) | (183) | (0.17) |
| 73 | 9.64 | 33.93 | 2.81 | 183 | | | | | | | |

110.35 SPENCER F. BAIRD; May 25, 1952; 1230 GCT; 29°46'N, 116°00.5'W; sounding, 700 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.28 | 33.42 | 5.94 | 324 | 0 | 15.28 | 33.42 | 5.94 | 24.71 | 324 | 0.00 |
| 9 | 15.37 | 33.45 | 5.96 | 324 | 10 | 15.3 | 33.45 | 5.97 | 24.73 | 322 | 0.03 |
| 23 | - | 33.40 | 6.51 | | 20 | 15.2 | 33.40 | 6.50 | 24.72 | 324 | 0.06 |
| 47 | 10.52 | 33.60 | 3.87 | 221 | 30 | 13.9 | 33.44 | 5.75 | 25.02 | 294 | 0.10 |
| 70 | - | 33.73 | 3.45 | | 50 | 10.40 | 33.63 | 3.80 | 25.84 | 217 | 0.15 |
| 93 | 10.09 | 34.05 | 2.01 | 181 | 75 | 9.70 | 33.81 | 3.25 | 26.09 | 193 | 0.20 |
| 143 | 10.06 | 34.25 | 1.46 | 166 | 100 | 10.09 | 34.10 | 1.81 | 26.25 | 177 | 0.25 |
| 187 | 9.23 | 34.13 | 2.05 | 162 | 150 | 10.05 | 34.25 | 1.47 | 26.38 | 166 | 0.33 |
| 232 | 8.69 | 34.33 | 1.42 | 139 | 200 | 9.07 | 34.22 | 1.94 | 26.52 | 153 | 0.41 |
| 279 | 8.15 | 34.33 | 1.05 | 131 | 250 | 8.51 | 34.33 | 1.28 | 26.69 | 136 | 0.49 |
| 377 | 7.08 | 34.31 | 0.62 | 118 | 300 | 7.88 | 34.32 | 0.93 | 26.78 | 128 | 0.56 |
| 475 | 6.60 | 34.38 | 0.36 | 106 | 400 | 6.96 | 34.32 | 0.54 | 26.91 | 115 | 0.68 |
| 576 | 5.95 | 34.43 | 0.25 | 94 | 500 | 6.46 | 34.39 | 0.31 | 27.03 | 104 | 0.80 |

110.40 SPENCER F. BAIRD; May 25, 1952; 0901 GCT; 29°37'N, 116°20'W; sounding, 1100 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 32°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.85 | 33.42 | 6.23 | 295 | 0 | 13.85 | 33.42 | 6.23 | 25.02 | 295 | 0.00 |
| 8 | 13.90 | 33.42 | 6.19 | 296 | 10 | 13.9 | 33.42 | 6.19 | 25.01 | 296 | 0.03 |
| 22 | - | 33.46 | 6.23 | | 20 | 13.9 | 33.46 | 6.27 | 25.04 | 293 | 0.06 |
| 42 | 11.98 | 33.42 | 5.18 | 260 | 30 | 13.8 | 33.45 | 6.15 | 25.05 | 292 | 0.09 |
| 64 | - | 33.51 | 4.26 | | 50 | 11.37 | 33.44 | 4.87 | 25.52 | 248 | 0.14 |
| 82 | 10.28 | 33.59 | 3.61 | 218 | 75 | 10.60 | 33.54 | 3.90 | 25.73 | 227 | 0.20 |
| 125 | 9.52 | 33.98 | 2.51 | 177 | 100 | 9.79 | 33.78 | 3.09 | 26.06 | 196 | 0.26 |
| 163 | 9.06 | 34.13 | 2.00 | 159 | 150 | 9.23 | 34.09 | 2.11 | 26.39 | 165 | 0.35 |
| 203 | 8.36 | 34.20 | 1.77 | 143 | 200 | 8.40 | 34.19 | 1.79 | 26.60 | 145 | 0.43 |
| 241 | 8.08 | 34.23 | 1.31 | 137 | 250 | 8.01 | 34.24 | 1.11 | 26.70 | 135 | 0.50 |
| 329 | 7.46 | 34.31 | 0.68 | 123 | 300 | 7.64 | 34.28 | 0.76 | 26.78 | 127 | 0.57 |
| 415 | 6.94 | 34.36 | 0.47 | 112 | 400 | 7.03 | 34.35 | 0.50 | 26.92 | 114 | 0.69 |
| 511 | 6.14 | 34.38 | 0.33 | 100 | 500 | 6.26 | 34.38 | 0.35 | 27.05 | 102 | 0.81 |

110.50 SPENCER F. BAIRD; May 25, 1952; 0337 GCT; 29°16.5'N, 116°59'W; sounding, 1600 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.11 | 33.32 | 5.43 | 349 | 0 | 16.11 | 33.32 | 5.43 | 24.45 | 349 | 0.00 |
| 9 | 16.14 | 33.31 | 5.73 | 350 | 10 | 16.1 | 33.31 | 5.84 | 24.45 | 349 | 0.03 |
| 23 | - | 33.31 | 6.28 | | 20 | 16.1 | 33.31 | 6.25 | 24.45 | 349 | 0.07 |
| 48 | - | 33.28 | 5.78 | | 30 | 16.1 | 33.31 | 6.24 | 24.45 | 349 | 0.10 |
| 72 | - | 33.28 | 5.95 | | 50 | 15.8 | 33.28 | 5.78 | 24.49 | 345 | 0.17 |
| 96 | - | 33.17 | 5.71 | | 75 | 14.1 | 33.28 | 5.93 | 24.86 | 310 | 0.26 |
| 147 | 9.74 | 33.62 | 3.78 | 207 | 100 | 11.8 | 33.17 | 5.60 | 25.23 | 275 | 0.33 |
| 195 | 8.84 | 33.98 | 2.78 | 167 | 150 | 9.61 | 33.66 | 3.69 | 25.99 | 202 | 0.45 |
| 242 | - | 34.11 | 1.98 | | 200 | 8.80 | 34.00 | 2.68 | 26.39 | 165 | 0.54 |
| 289 | 8.08 | 34.20 | 1.28 | 139 | 250 | 8.38 | 34.13 | 1.85 | 26.55 | 149 | 0.63 |
| 387 | 7.29 | 34.33 | 0.64 | 119 | 300 | 7.98 | 34.22 | 1.15 | 26.69 | 137 | 0.70 |
| 481 | 6.48 | 34.45 | 0.44 | 99 | 400 | 7.16 | 34.34 | 0.62 | 26.90 | 116 | 0.83 |
| 580 | 5.69 | 34.36 | 0.31 | 96 | 500 | 6.29 | 34.37 | 0.41 | 27.04 | 103 | 0.95 |
| 772 | 4.70 | 34.45 | 0.36 | 79 | 600 | 5.56 | 34.45 | 0.31 | 27.19 | 88 | 1.05 |
| 966 | 4.07 | 34.47 | 0.60 | 71 | 700 | 5.03 | 34.45 | 0.32 | 27.26 | 82 | 1.14 |
| 1163 | 3.57 | 34.52 | 0.77 | 62 | 800 | 4.60 | 34.45 | 0.38 | 27.31 | 78 | 1.23 |
| | | | | | 1000 | 3.96 | 34.48 | 0.63 | 27.40 | 69 | 1.39 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

SPENCER F. BAIRD; May 24, 1952; 2218 GCT; 28°56'N, 117°39'W; sounding, 2000 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 18°. 1 10.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.04 | 33.26 | 5.79 | 352 | 0 | 16.04 | 33.26 | 5.79 | 24.42 | 352 | 0.00 |
| 9 | 15.79 | 33.28 | 5.79 | 345 | 10 | 15.8 | 33.28 | 5.79 | 24.49 | 345 | 0.03 |
| 23 | - | 33.29 | 5.84 | | 20 | 15.8 | 33.29 | 5.84 | 24.50 | 344 | 0.07 |
| 47 | 15.84 | 33.42 | 5.82 | 336 | 30 | 15.8 | 33.31 | 5.83 | 24.51 | 343 | 0.10 |
| 71 | - | 33.49 | 5.82 | | 50 | 15.89 | 33.44 | 5.82 | 24.59 | 335 | 0.17 |
| 94 | 14.28 | 33.44 | 5.66 | 302 | 75 | 15.30 | 33.49 | 5.80 | 24.76 | 319 | 0.25 |
| 145 | 10.45 | 33.48 | 4.34 | 229 | 100 | 13.85 | 33.44 | 5.59 | 25.03 | 293 | 0.33 |
| 190 | 9.12 | 33.77 | 3.55 | 187 | 150 | 10.29 | 33.50 | 4.23 | 25.75 | 225 | 0.46 |
| 234 | 8.37 | 34.02 | 2.87 | 157 | 200 | 8.93 | 33.84 | 3.41 | 26.24 | 179 | 0.56 |
| 278 | 7.92 | 34.07 | 2.02 | 147 | 250 | 8.19 | 34.04 | 2.59 | 26.51 | 153 | 0.65 |
| 373 | 6.96 | 34.16 | 1.12 | 127 | 300 | 7.70 | 34.09 | 1.71 | 26.62 | 142 | 0.73 |
| 466 | 6.28 | 34.24 | 0.54 | 113 | 400 | 6.73 | 34.18 | 0.90 | 26.83 | 123 | 0.86 |
| 567 | 5.80 | 34.33 | 0.44 | 100 | 500 | 6.08 | 34.27 | 0.50 | 26.99 | 108 | 0.99 |

SPENCER F. BAIRD; May 24, 1952; 1636 GCT; 28°36'N, 118°18'W; sounding, 1700 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 12°. 1 10.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.73 | 33.51 | 5.70 | 349 | 0 | 16.73 | 33.51 | 5.70 | 24.46 | 349 | 0.00 |
| 10 | 16.74 | 33.53 | 5.71 | 347 | 10 | 16.74 | 33.53 | 5.71 | 24.47 | 347 | 0.03 |
| 25 | - | 33.55 | 5.77 | | 20 | 16.7 | 33.55 | 5.74 | 24.49 | 345 | 0.07 |
| 49 | - | 33.55 | 5.79 | | 30 | 16.7 | 33.55 | 5.78 | 24.49 | 345 | 0.10 |
| 73 | - | 33.55 | 5.88 | | 50 | 16.6 | 33.55 | 5.80 | 24.52 | 343 | 0.17 |
| 98 | - | 33.48 | 5.90 | | 75 | 15.5 | 33.55 | 5.88 | 24.77 | 319 | 0.26 |
| 150 | 11.62 | 33.56 | 4.24 | 243 | 100 | 14.6 | 33.48 | 5.90 | 24.91 | 305 | 0.33 |
| 197 | 9.70 | 33.80 | 3.76 | 193 | 150 | 11.62 | 33.56 | 4.24 | 25.56 | 243 | 0.47 |
| 244 | - | 34.11 | 2.97 | | 200 | 9.62 | 33.88 | 3.70 | 26.16 | 186 | 0.58 |
| 292 | 8.45 | 34.13 | 2.08 | 150 | 250 | 8.92 | 34.12 | 2.83 | 26.46 | 158 | 0.67 |
| 391 | 7.34 | 34.23 | 0.87 | 127 | 300 | 8.35 | 34.14 | 1.93 | 26.57 | 148 | 0.75 |
| 487 | 6.52 | 34.27 | 0.53 | 113 | 400 | 7.27 | 34.23 | 0.81 | 26.80 | 126 | 0.89 |
| 587 | 5.71 | 34.34 | 0.32 | 98 | 500 | 6.43 | 34.27 | 0.50 | 26.94 | 112 | 1.02 |
| 786 | 4.80 | 34.42 | 0.38 | 82 | 600 | 5.61 | 34.35 | 0.32 | 27.11 | 96 | 1.13 |
| 981 | 4.12 | 34.47 | 0.57 | 71 | 700 | 5.10 | 34.39 | 0.33 | 27.20 | 88 | 1.23 |
| 1185 | 3.54 | 34.52 | 0.78 | 62 | 800 | 4.76 | 34.42 | 0.39 | 27.26 | 82 | 1.32 |
| | | | | | 1000 | 4.05 | 34.48 | 0.59 | 27.39 | 70 | 1.49 |

SPENCER F. BAIRD; May 24, 1952; 1126 GCT; 28°16'N, 118°57'W; sounding, 1800 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 20°. 1 10.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.84 | 33.51 | 5.64 | 351 | 0 | 16.84 | 33.51 | 5.64 | 24.43 | 351 | 0.00 |
| 9 | 16.92 | 33.51 | 5.58 | 353 | 10 | 16.9 | 33.51 | 5.58 | 24.42 | 352 | 0.04 |
| 23 | - | 33.51 | 5.69 | | 20 | 16.8 | 33.51 | 5.67 | 24.44 | 350 | 0.07 |
| 52 | 16.56 | 33.53 | 5.76 | 343 | 30 | 16.7 | 33.51 | 5.72 | 24.46 | 348 | 0.11 |
| 75 | - | 33.55 | 5.72 | | 50 | 16.7 | 33.53 | 5.76 | 24.48 | 346 | 0.17 |
| 102 | 15.70 | 33.66 | 5.66 | 315 | 75 | 15.8 | 33.55 | 5.72 | 24.70 | 325 | 0.26 |
| 151 | 11.29 | 33.69 | 3.65 | 228 | 100 | 15.7 | 33.65 | 5.66 | 24.80 | 316 | 0.34 |
| 200 | 10.16 | 34.05 | 2.38 | 182 | 150 | 11.30 | 33.69 | 3.73 | 25.72 | 228 | 0.48 |
| 254 | 9.27 | 34.23 | 1.73 | 155 | 200 | 10.16 | 34.05 | 2.38 | 26.20 | 182 | 0.58 |
| 299 | 8.62 | 34.23 | 1.44 | 145 | 250 | 9.34 | 34.23 | 1.78 | 26.48 | 156 | 0.67 |
| 406 | 7.43 | 34.31 | 0.61 | 122 | 300 | 8.62 | 34.23 | 1.44 | 26.60 | 145 | 0.75 |
| 511 | 6.62 | 34.36 | 0.38 | 108 | 400 | 7.49 | 34.30 | 0.64 | 26.82 | 124 | 0.89 |
| 619 | 5.60 | 34.36 | 0.38 | 95 | 500 | 6.70 | 34.36 | 0.38 | 26.98 | 109 | 1.01 |
| | | | | | 600 | 5.77 | 34.36 | 0.38 | 27.10 | 97 | 1.12 |

SIO
CCOFI
5205

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

110.90 SPENCER F. BAIRD; May 24, 1952; 0627 GCT; 28°01'N, 119°36'W; sounding, 1900 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 26°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.43 | 33.68 | 5.56 | 352 | 0 | 17.43 | 33.68 | 5.56 | 24.42 | 352 | 0.00 |
| 8 | 17.48 | 33.64 | 5.56 | 356 | 10 | 17.5 | 33.64 | 5.57 | 24.37 | 356 | 0.04 |
| 23 | - | 33.71 | 5.58 | | 20 | 17.5 | 33.71 | 5.58 | 24.43 | 351 | 0.07 |
| 44 | - | 33.71 | 5.68 | | 30 | 17.5 | 33.71 | 5.60 | 24.43 | 351 | 0.11 |
| 68 | - | 33.71 | 5.61 | | 50 | 17.1 | 33.71 | 5.69 | 24.52 | 342 | 0.18 |
| 90 | - | 33.73 | 5.71 | | 75 | 16.2 | 33.71 | 5.64 | 24.73 | 322 | 0.26 |
| 135 | 12.01 | 33.55 | 4.52 | 251 | 100 | 16.1 | 33.73 | 5.70 | 24.77 | 319 | 0.34 |
| 176 | 10.60 | 33.89 | 2.99 | 201 | 150 | 11.30 | 33.58 | 3.84 | 25.64 | 236 | 0.48 |
| 217 | - | 34.13 | 2.14 | | 200 | 10.31 | 34.04 | 2.45 | 26.17 | 185 | 0.59 |
| 259 | 9.78 | 34.29 | 1.51 | 158 | 250 | 9.87 | 34.26 | 1.63 | 26.42 | 162 | 0.68 |
| 347 | 8.79 | 34.42 | 0.80 | 133 | 300 | 9.36 | 34.38 | 1.09 | 26.59 | 145 | 0.76 |
| 429 | 7.75 | 34.40 | 0.56 | 120 | 400 | 8.09 | 34.41 | 0.62 | 26.82 | 124 | 0.90 |
| 520 | 6.79 | 34.42 | 0.32 | 106 | 500 | 6.98 | 34.42 | 0.36 | 26.99 | 108 | 1.02 |
| 696 | 5.54 | 34.42 | 0.26 | 90 | 600 | 6.17 | 34.42 | 0.28 | 27.09 | 98 | 1.13 |
| 875 | 4.65 | 34.45 | 0.44 | 78 | 700 | 5.52 | 34.42 | 0.26 | 27.18 | 90 | 1.23 |
| 1067 | 3.94 | 34.47 | 0.61 | 69 | 800 | 4.98 | 34.43 | 0.32 | 27.25 | 83 | 1.33 |
| | | | | | 1000 | 4.18 | 34.47 | 0.58 | 27.37 | 72 | 1.50 |

113.30 SPENCER F. BAIRD; May 23, 1952; 0125 GCT; 29°22.5'N, 115°17.5'W; sounding, 35 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.14 | 33.65 | 6.27 | 246 | 0 | 12.14 | 33.65 | 6.27 | 25.53 | 246 | 0.00 |
| 9 | 12.18 | 33.64 | 6.36 | 247 | 10 | 12.17 | 33.64 | 6.34 | 25.52 | 247 | 0.02 |
| 19 | 11.70 | 33.66 | 5.39 | 237 | 20 | 11.66 | 33.66 | 5.25 | 25.63 | 236 | 0.05 |
| 29 | 11.10 | 33.68 | 3.80 | 225 | 30 | 10.87 | 33.68 | 3.60 | 25.79 | 221 | 0.07 |
| 38 | 10.50 | 33.73 | 2.73 | 211 | 50 | (10.37) | (33.79) | | (25.96) | (205) | (0.11) |
| 48 | 10.39 | 33.78 | 2.39 | 206 | | | | | | | |

113.40 SPENCER F. BAIRD; May 23, 1952; 0632 GCT; 28°58.5'N, 116°02.5'W; sounding, 900 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 32°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.44 | 33.46 | 5.73 | 346 | 0 | 16.44 | 33.46 | 5.73 | 24.48 | 346 | 0.00 |
| 8 | 16.36 | 33.35 | 5.83 | 352 | 10 | 16.3 | 33.35 | 5.83 | 24.43 | 351 | 0.03 |
| 21 | - | 33.35 | 5.73 | | 20 | 16.3 | 33.35 | 5.73 | 24.43 | 351 | 0.07 |
| 42 | 15.56 | 33.33 | 5.86 | 336 | 30 | 16.3 | 33.34 | 5.78 | 24.42 | 351 | 0.11 |
| 64 | - | 33.32 | 5.81 | | 50 | 15.2 | 33.33 | 5.86 | 24.66 | 329 | 0.17 |
| 84 | 11.83 | 33.26 | 5.36 | 269 | 75 | 12.7 | 33.29 | 4.70 | 25.15 | 283 | 0.25 |
| 126 | 9.94 | 33.64 | 3.67 | 209 | 100 | 11.79 | 33.31 | 3.01 | 25.34 | 265 | 0.32 |
| 164 | 9.26 | 34.00 | 2.75 | 172 | 150 | 9.46 | 33.90 | 2.30 | 26.20 | 182 | 0.43 |
| 202 | 8.95 | 34.16 | 2.27 | 155 | 200 | 8.97 | 34.15 | 1.25 | 26.48 | 156 | 0.52 |
| 243 | 8.61 | 34.23 | 1.37 | 145 | 250 | 8.57 | 34.24 | 0.99 | 26.61 | 144 | 0.60 |
| 330 | 7.84 | 34.29 | 0.93 | 129 | 300 | 8.11 | 34.28 | 0.67 | 26.71 | 134 | 0.67 |
| 419 | 7.31 | 34.27 | 0.60 | 124 | 400 | 7.43 | 34.27 | 0.39 | 26.80 | 125 | 0.80 |
| 518 | 6.24 | 34.29 | 0.36 | 108 | 500 | 6.44 | 34.28 | 0.39 | 26.95 | 112 | 0.93 |

113.50 SPENCER F. BAIRD; May 23, 1952; 1141 GCT; 28°36'N, 116°34'W; sounding, 2000 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.21 | 33.30 | 5.73 | 352 | 0 | 16.21 | 33.30 | 5.73 | 24.41 | 352 | 0.00 |
| 8 | 16.12 | 33.30 | 5.78 | 351 | 10 | 16.1 | 33.30 | 5.78 | 24.44 | 350 | 0.04 |
| 22 | - | 33.30 | 5.78 | | 20 | 16.1 | 33.30 | 5.78 | 24.44 | 350 | 0.07 |
| 49 | 15.27 | 33.37 | 5.89 | 327 | 30 | 16.1 | 33.31 | 5.80 | 24.45 | 349 | 0.11 |
| 70 | - | 33.37 | 5.86 | | 50 | 15.2 | 33.37 | 5.88 | 24.69 | 326 | 0.17 |
| 96 | 11.16 | 33.28 | 4.87 | 256 | 75 | 14.1 | 33.36 | 5.80 | 24.92 | 304 | 0.25 |
| 141 | 9.57 | 33.66 | 3.66 | 202 | 100 | 10.84 | 33.28 | 4.74 | 25.49 | 250 | 0.32 |
| 185 | 8.98 | 33.95 | 2.63 | 171 | 150 | 9.42 | 33.76 | 3.40 | 26.10 | 192 | 0.43 |
| 235 | 8.50 | 34.05 | 2.08 | 157 | 200 | 8.84 | 33.98 | 2.47 | 26.37 | 167 | 0.53 |
| 278 | 8.05 | 34.19 | 1.36 | 140 | 250 | 8.34 | 34.10 | 1.89 | 26.54 | 151 | 0.61 |
| 380 | 6.99 | 34.22 | 0.90 | 123 | 300 | 7.79 | 34.19 | 1.13 | 26.69 | 136 | 0.68 |
| 482 | 6.46 | 34.33 | 0.41 | 108 | 400 | 6.87 | 34.24 | 0.79 | 26.86 | 120 | 0.81 |
| 591 | 5.84 | 34.38 | 0.29 | 97 | 500 | 6.37 | 34.35 | 0.38 | 27.01 | 105 | 0.93 |
| | | | | | 600 | (5.79) | (34.38) | (0.29) | (27.11) | (96) | (1.04) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m | |
| SPENCER F. BAIRD; May 23, 1952; 1623, 1637, 1659 GCT; 28°22'N, 117°17'W; sounding, 1950 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 21°, 21°, 20°. | | | | | | | | | | | | 113.60 |
| 0 | 15.92 | 33.28 | 5.74 | 348 | 0 | 15.92 | 33.28 | 5.74 | 24.46 | 348 | 0.00 | |
| 9 | 16.00 | 33.30 | 5.81 | 348 | 10 | 16.0 | 33.30 | 5.81 | 24.46 | 348 | 0.03 | |
| 23 | - | 33.31 | 5.74 | | 20 | 16.0 | 33.31 | 5.76 | 24.47 | 347 | 0.07 | |
| | | | | | 30 | 16.0 | 33.38 | 5.74 | 24.52 | 342 | 0.10 | |
| 46 | 15.96 | 33.57 | 5.78 | 327 | 50 | 15.9 | 33.56 | 5.79 | 24.68 | 327 | 0.17 | |
| 70 | - | 33.51 | 5.79 | | 75 | 15.7 | 33.50 | 5.73 | 24.68 | 327 | 0.25 | |
| 93 | 14.19 | 33.39 | 5.56 | 304 | 100 | 12.80 | 33.38 | 5.44 | 25.20 | 278 | 0.33 | |
| 145 | 10.13 | 33.44 | 4.27 | 227 | 150 | 9.98 | 33.45 | 4.19 | 25.77 | 224 | 0.46 | |
| 191 | 9.16 | 33.78 | 3.34 | 186 | 200 | 9.08 | 33.89 | 3.11 | 26.26 | 177 | 0.56 | |
| 238 | 8.97 | 34.05 | 2.31 | 164 | 250 | 8.87 | 34.04 | 2.19 | 26.41 | 163 | 0.65 | |
| | | | | | 300 | 7.94 | 33.98 | 1.90 | 26.50 | 154 | 0.73 | |
| 285 | 8.18 | 33.96 | 1.99 | 159 | 400 | 7.22 | 34.21 | 0.74 | 26.79 | 127 | 0.87 | |
| 385 | 7.34 | 34.20 | 0.82 | 129 | 500 | 6.33 | 34.24 | 0.43 | 26.93 | 113 | 1.00 | |
| 483 | 6.48 | 34.23 | 0.47 | 116 | 600 | (5.80) | (34.30) | | (27.05) | (102) | (1.11) | |
| 587 | 5.86 | 34.29 | 0.29 | 104 | | | | | | | | |
| SPENCER F. BAIRD; May 23, 1952; 2129 GCT; 28°04'N, 117°56'W; sounding, 2000 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 06°. | | | | | | | | | | | | 113.70 |
| 0 | 16.70 | 33.28 | 5.68 | 365 | 0 | 16.70 | 33.28 | 5.68 | 24.29 | 365 | 0.00 | |
| 10 | 16.63 | 33.30 | 5.71 | 362 | 10 | 16.63 | 33.30 | 5.71 | 24.32 | 362 | 0.04 | |
| 25 | - | 33.33 | 5.78 | | 20 | 16.6 | 33.32 | 5.77 | 24.34 | 360 | 0.07 | |
| 50 | 16.03 | 33.40 | 5.78 | 341 | 30 | 16.3 | 33.35 | 5.78 | 24.43 | 351 | 0.11 | |
| 75 | - | 33.33 | 5.86 | | 50 | 16.03 | 33.40 | 5.78 | 24.53 | 341 | 0.18 | |
| 99 | 12.51 | 33.26 | 5.24 | 281 | 75 | 14.8 | 33.33 | 5.86 | 24.75 | 321 | 0.26 | |
| 152 | 10.42 | 33.85 | 3.17 | 201 | 100 | 12.50 | 33.26 | 5.17 | 25.16 | 281 | 0.34 | |
| 201 | 9.32 | 34.02 | 2.47 | 171 | 150 | 10.47 | 33.84 | 3.19 | 25.99 | 203 | 0.46 | |
| 249 | 8.76 | 34.12 | 1.90 | 155 | 200 | 9.34 | 34.02 | 2.47 | 26.32 | 171 | 0.55 | |
| 298 | 8.04 | 34.14 | 1.54 | 143 | 250 | 8.74 | 34.12 | 1.88 | 26.49 | 155 | 0.64 | |
| 400 | 7.21 | 34.25 | 0.69 | 124 | 300 | 8.03 | 34.14 | 1.52 | 26.62 | 143 | 0.71 | |
| 500 | 6.32 | 34.33 | 0.36 | 106 | 400 | 7.21 | 34.25 | 0.69 | 26.82 | 124 | 0.85 | |
| 604 | 5.70 | 34.40 | 0.31 | 94 | 500 | 6.32 | 34.33 | 0.36 | 27.00 | 106 | 0.98 | |
| | | | | | 600 | 5.72 | 34.39 | 0.31 | 27.13 | 95 | 1.08 | |
| SPENCER F. BAIRD; May 22, 1952; 2105 GCT; 28°56'N, 114°41'W; sounding, 39 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | | | 117.26 |
| 0 | 14.83 | 33.51 | 7.25 | 308 | 0 | 14.83 | 33.51 | 7.25 | 24.88 | 308 | 0.00 | |
| 10 | 12.64 | 33.53 | 6.05 | 264 | 10 | 12.64 | 33.53 | 6.05 | 25.35 | 264 | 0.03 | |
| 20 | 11.20 | 33.53 | 4.84 | 238 | 20 | 11.20 | 33.53 | 4.84 | 25.62 | 238 | 0.05 | |
| 30 | 10.46 | 33.54 | 3.93 | 225 | 30 | 10.46 | 33.54 | 3.93 | 25.75 | 225 | 0.08 | |
| 40 | 10.30 | 33.68 | 3.17 | 212 | 50 | (9.87) | (33.69) | (3.31) | (25.97) | (204) | (0.12) | |
| 49 | 9.88 | 33.69 | 3.32 | 204 | | | | | | | | |
| SPENCER F. BAIRD; May 22, 1952; 1911 GCT; 28°48'N, 114°57'W; sounding, 55 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 05°. | | | | | | | | | | | | 117.30 |
| 0 | 15.06 | 33.57 | 7.00 | 308 | 0 | 15.06 | 33.57 | 7.00 | 24.88 | 308 | 0.00 | |
| 10 | 14.95 | 33.57 | 6.95 | 306 | 10 | 14.95 | 33.57 | 6.95 | 24.90 | 306 | 0.03 | |
| 20 | 14.18 | 33.58 | 6.82 | 290 | 20 | 14.18 | 33.58 | 6.82 | 25.07 | 290 | 0.06 | |
| 30 | 11.96 | 33.55 | 4.61 | 250 | 30 | 11.96 | 33.55 | 4.61 | 25.49 | 250 | 0.09 | |
| 50 | 10.18 | 33.73 | 3.12 | 206 | 50 | 10.18 | 33.73 | 3.12 | 25.95 | 206 | 0.13 | |
| 75 | 9.75 | 33.91 | 2.56 | 186 | 75 | 9.75 | 33.91 | 2.56 | 26.16 | 186 | 0.18 | |
| SPENCER F. BAIRD; May 22, 1952; 1403 GCT; 28°28'N, 115°37.5'W; sounding, 600 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 26°. | | | | | | | | | | | | 117.40 |
| 0 | 15.82 | 33.39 | 5.92 | 337 | 0 | 15.82 | 33.39 | 5.92 | 24.57 | 337 | 0.00 | |
| 8 | 15.90 | 33.37 | 6.02 | 341 | 10 | 15.9 | 33.36 | 6.02 | 24.53 | 341 | 0.03 | |
| 22 | - | 33.31 | 5.87 | | 20 | 15.9 | 33.32 | 5.90 | 24.50 | 344 | 0.07 | |
| 49 | 13.45 | 33.26 | 5.71 | 299 | 30 | 15.6 | 33.29 | 5.82 | 24.54 | 340 | 0.10 | |
| 72 | - | 33.39 | 4.48 | | 50 | 13.4 | 33.26 | 5.70 | 24.99 | 298 | 0.17 | |
| 98 | 10.26 | 33.58 | 3.81 | 219 | 75 | 11.6 | 33.41 | 4.38 | 25.45 | 254 | 0.24 | |
| 144 | 9.80 | 34.11 | 1.91 | 172 | 100 | 10.20 | 33.60 | 3.73 | 25.85 | 216 | 0.30 | |
| 190 | 10.39 | 34.47 | 0.66 | 155 | 150 | 9.83 | 34.17 | 1.60 | 26.35 | 168 | 0.39 | |
| | | | | | 200 | (10.36) | (34.49) | (0.61) | (26.51) | (153) | (0.47) | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

117.50 SPENCER F. BAIRD; May 22, 1952; 0800, 0835 GCT; 27°55'N, 116°04'W; sounding, 2000 fm; wind, 320°, force 3; weather, cloudy; sea, slight; wire angle, 25°, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.61 | 33.53 | 5.70 | 344 | 0 | 16.61 | 33.53 | 5.70 | 24.50 | 344 | 0.00 |
| 8 | 16.68 | 33.49 | 5.78 | 349 | 10 | 16.7 | 33.49 | 5.82 | 24.45 | 349 | 0.03 |
| 22 | - | 33.51 | 6.09 | | 20 | 16.7 | 33.51 | 6.08 | 24.46 | 348 | 0.07 |
| 45 | 11.86 | 33.35 | 4.78 | 263 | 30 | 14.5 | 33.49 | 6.00 | 24.94 | 303 | 0.10 |
| 68 | - | 33.68 | 3.53 | | 50 | 11.8 | 33.35 | 4.50 | 25.37 | 262 | 0.16 |
| 90 | 10.25 | 33.98 | 2.59 | 189 | 75 | 10.5 | 33.78 | 3.16 | 25.93 | 208 | 0.22 |
| | | | | | 100 | 10.3 | 34.16 | 2.21 | 26.27 | 176 | 0.27 |
| 136 | 10.49 | 34.40 | 1.35 | 162 | 150 | 10.45 | 34.45 | 1.10 | 26.46 | 157 | 0.35 |
| 174 | 10.26 | 34.47 | 0.79 | 153 | 200 | 9.86 | 34.44 | 0.80 | 26.56 | 149 | 0.43 |
| 217 | 9.50 | 34.42 | 0.83 | 144 | 250 | 9.04 | 34.40 | 0.60 | 26.66 | 139 | 0.50 |
| 260 | 8.92 | 34.40 | 0.56 | 137 | 300 | 8.50 | 34.40 | 0.53 | 26.75 | 131 | 0.57 |
| 354 | 7.92 | 34.42 | 0.47 | 121 | 400 | 7.40 | 34.42 | 0.38 | 26.93 | 114 | 0.70 |
| 447 | 6.91 | 34.40 | 0.29 | 109 | 500 | 6.45 | 34.41 | 0.26 | 27.05 | 102 | 0.82 |
| 551 | 6.15 | 34.42 | 0.25 | 97 | | | | | | | |

117.60 SPENCER F. BAIRD; May 22, 1952; 0114 GCT; 27°15'N, 116°57'W; sounding, 2000 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.09 | - | 5.68 | | 0 | 17.09 | (33.39) | 5.68 | (24.28) | (365) | (0.00) |
| 8 | 16.94 | 33.39 | 5.69 | 362 | 10 | 16.9 | 33.39 | 5.69 | 24.32 | 361 | 0.04 |
| 23 | - | 33.39 | 5.86 | | 20 | 16.8 | 33.39 | 5.83 | 24.35 | 359 | 0.07 |
| 45 | 16.42 | 33.44 | 5.87 | 347 | 30 | 16.8 | 33.39 | 5.87 | 24.35 | 359 | 0.11 |
| 67 | - | 33.42 | 5.91 | | 50 | 16.0 | 33.44 | 5.89 | 24.57 | 338 | 0.18 |
| 89 | 13.10 | 33.39 | 5.33 | 283 | 75 | 14.2 | 33.40 | 5.88 | 24.93 | 303 | 0.26 |
| 133 | 10.59 | 33.88 | 2.99 | 202 | 100 | 12.23 | 33.42 | 4.39 | 25.34 | 264 | 0.33 |
| 175 | 9.94 | 34.20 | 1.91 | 168 | 150 | 10.21 | 34.04 | 2.55 | 26.19 | 184 | 0.44 |
| 216 | 9.88 | 34.38 | 1.03 | 153 | 200 | 9.92 | 34.33 | 1.32 | 26.46 | 158 | 0.53 |
| 258 | 9.43 | 34.42 | 0.74 | 143 | 250 | 9.55 | 34.42 | 0.76 | 26.59 | 145 | 0.61 |
| 349 | 8.44 | 34.42 | 0.50 | 128 | 300 | 8.93 | 34.42 | 0.62 | 26.70 | 136 | 0.68 |
| 439 | 7.48 | 34.40 | 0.31 | 116 | 400 | 7.87 | 34.41 | 0.38 | 26.85 | 121 | 0.82 |
| 540 | 6.64 | 34.40 | 0.29 | 105 | 500 | 6.95 | 34.40 | 0.30 | 26.97 | 109 | 0.94 |

117.70 SPENCER F. BAIRD; May 21, 1952; 2028 GCT; 27°15'N, 117°42'W; sounding, 2000 fm; wind, 270°, force 2; weather, overcast; sea, slight; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.44 | 33.49 | 5.61 | 366 | 0 | 17.44 | 33.49 | 5.61 | 24.27 | 366 | 0.00 |
| 10 | 17.28 | 33.49 | 5.68 | 362 | 10 | 17.28 | 33.49 | 5.68 | 24.31 | 362 | 0.04 |
| 25 | - | 33.48 | 5.66 | | 20 | 17.2 | 33.49 | 5.66 | 24.33 | 361 | 0.07 |
| 50 | 15.90 | 33.42 | 5.91 | 337 | 30 | 17.2 | 33.47 | 5.67 | 24.31 | 362 | 0.11 |
| 75 | - | 33.48 | 5.84 | | 50 | 15.90 | 33.42 | 5.91 | 24.58 | 337 | 0.18 |
| 99 | 12.98 | 33.44 | 5.09 | 277 | 75 | 15.1 | 33.48 | 5.84 | 24.80 | 316 | 0.26 |
| 153 | 10.30 | 33.91 | 2.76 | 195 | 100 | 12.90 | 33.44 | 5.01 | 25.23 | 275 | 0.34 |
| 202 | 10.07 | 34.22 | 1.75 | 168 | 150 | 10.50 | 33.87 | 2.83 | 26.00 | 201 | 0.46 |
| 250 | 9.62 | 34.40 | 1.06 | 148 | 200 | 10.08 | 34.20 | 1.81 | 26.33 | 170 | 0.55 |
| 299 | 8.94 | 34.42 | 0.83 | 136 | 250 | 9.62 | 34.40 | 1.06 | 26.57 | 148 | 0.63 |
| 403 | 8.00 | 34.37 | 0.46 | 126 | 300 | 8.93 | 34.42 | 0.83 | 26.70 | 136 | 0.71 |
| 503 | 6.90 | 34.36 | 0.28 | 111 | 400 | 8.04 | 34.37 | 0.48 | 26.79 | 126 | 0.84 |
| 607 | 5.96 | 34.42 | 0.26 | 95 | 500 | 6.94 | 34.36 | 0.28 | 26.94 | 112 | 0.97 |
| | | | | | 600 | 6.01 | 34.42 | 0.27 | 27.11 | 96 | 1.08 |

120.25 SPENCER F. BAIRD; May 20, 1952; 0427 GCT; 28°24'N, 114°16'W; sounding, 30 fm; wind, 320°, force 3; weather, fog; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.40 | 33.53 | 6.87 | 318 | 0 | 15.40 | 33.53 | 6.87 | 24.77 | 318 | 0.00 |
| 9 | 15.26 | 33.53 | 6.79 | 315 | 10 | 15.25 | 33.53 | 6.78 | 24.81 | 315 | 0.03 |
| 19 | 14.36 | 33.57 | 6.76 | 294 | 20 | 14.30 | 33.57 | 6.75 | 25.04 | 293 | 0.06 |
| 28 | 12.52 | 33.53 | 4.72 | 262 | 30 | 12.20 | 33.52 | 4.35 | 25.42 | 256 | 0.09 |
| 38 | 11.24 | 33.51 | 3.66 | 240 | 50 | (10.78) | (33.56) | | (25.71) | (229) | (0.14) |
| 48 | 10.82 | 33.56 | 3.47 | 229 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; May 20, 1952; 0627 GCT; 28°13'N, 114°33.5'W; sounding, 50 fm; wind, 330°, force 2; weather, fog; sea, slight; wire angle, 18°. 120.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.99 | 33.53 | 6.00 | 331 | 0 | 15.99 | 33.53 | 6.00 | 24.64 | 331 | 0.00 |
| 9 | 15.88 | 33.51 | 6.02 | 330 | 10 | 15.87 | 33.51 | 6.04 | 24.65 | 330 | 0.03 |
| 19 | 15.77 | 33.51 | 6.09 | 328 | 20 | 15.76 | 33.51 | 6.09 | 24.68 | 327 | 0.07 |
| 28 | 15.71 | 33.55 | 6.14 | 323 | 30 | 15.70 | 33.56 | 6.12 | 24.73 | 323 | 0.10 |
| 48 | 14.66 | 33.58 | 5.50 | 299 | 50 | 14.75 | 33.58 | 5.30 | 24.95 | 301 | 0.16 |
| 62 | 11.62 | 33.58 | 3.70 | 242 | 75 | (10.87) | (33.82) | (2.20) | (25.90) | (211) | (0.23) |
| 71 | 10.98 | 33.80 | 2.45 | 214 | | | | | | | |

SPENCER F. BAIRD; May 20, 1952; 0849 GCT; 28°03'N, 114°54'W; sounding, 42 fm; wind, 270°, force 3; weather, overcast; sea, slight; wire angle, 02°. 120.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.00 | 33.57 | 6.05 | 328 | 0 | 16.00 | 33.57 | 6.05 | 24.67 | 328 | 0.00 |
| 10 | 15.92 | 33.57 | 6.09 | 326 | 10 | 15.92 | 33.57 | 6.09 | 24.69 | 326 | 0.03 |
| 20 | 15.84 | 33.53 | 6.07 | 328 | 20 | 15.84 | 33.53 | 6.07 | 24.67 | 328 | 0.07 |
| 30 | 15.69 | 33.55 | 6.10 | 323 | 30 | 15.69 | 33.55 | 6.10 | 24.72 | 323 | 0.10 |
| 40 | 15.40 | 33.55 | 6.23 | 317 | 50 | 14.08 | 33.57 | 6.38 | 25.09 | 288 | 0.16 |
| 50 | 14.08 | 33.57 | 6.38 | 288 | | | | | | | |

SPENCER F. BAIRD; May 20, 1952; 1312 GCT; 27°43.5'N, 115°33'W; sounding, 1180 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 15°. 120.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.38 | 33.48 | 5.81 | 343 | 0 | 16.38 | 33.48 | 5.81 | 24.51 | 343 | 0.00 |
| 10 | 16.28 | 33.49 | 5.86 | 340 | 10 | 16.28 | 33.49 | 5.86 | 24.54 | 340 | 0.03 |
| 24 | - | 33.44 | 6.05 | | 20 | 16.1 | 33.44 | 6.03 | 24.55 | 340 | 0.07 |
| 53 | - | 33.51 | 4.25 | | 30 | 14.5 | 33.45 | 6.00 | 24.91 | 306 | 0.10 |
| 78 | - | 33.74 | 3.40 | | 50 | 11.6 | 33.50 | 4.40 | 25.52 | 247 | 0.16 |
| 107 | - | 33.96 | 2.67 | | 75 | 10.6 | 33.73 | 3.45 | 25.88 | 213 | 0.21 |
| 159 | 10.23 | 34.33 | 1.31 | 163 | 100 | 10.4 | 33.90 | 2.81 | 26.05 | 197 | 0.27 |
| 211 | 9.78 | 34.40 | 0.89 | 150 | 150 | 10.3 | 34.26 | 1.40 | 26.34 | 169 | 0.36 |
| 268 | - | 34.43 | 0.49 | | 200 | 9.88 | 34.39 | 0.99 | 26.52 | 153 | 0.44 |
| 315 | 8.54 | 34.43 | 0.48 | 129 | 250 | 9.1 | 34.38 | 0.54 | 26.64 | 141 | 0.52 |
| 425 | 7.50 | 34.43 | 0.29 | 114 | 300 | 8.71 | 34.43 | 0.49 | 26.74 | 132 | 0.59 |
| 529 | 6.37 | 34.42 | 0.26 | 100 | 400 | 7.71 | 34.43 | 0.33 | 26.89 | 117 | 0.72 |
| 635 | 5.67 | 34.40 | 0.25 | 93 | 500 | 6.63 | 34.43 | 0.26 | 27.04 | 103 | 0.83 |
| 842 | 4.65 | 34.45 | 0.38 | 78 | 600 | 5.88 | 34.41 | 0.26 | 27.12 | 95 | 0.94 |
| 1052 | 3.87 | 34.52 | 0.56 | 65 | 700 | 5.30 | 34.41 | 0.27 | 27.19 | 88 | 1.04 |
| 1255 | 3.37 | 34.54 | 0.86 | 59 | 800 | 4.82 | 34.43 | 0.32 | 27.27 | 81 | 1.13 |
| | | | | | 1000 | 4.03 | 34.51 | 0.52 | 27.42 | 67 | 1.30 |

SPENCER F. BAIRD; May 20, 1952; 1700 GCT; 27°31'N, 115°56'W; sounding, 2200 fm; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 11°. 120.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.56 | 33.44 | 5.74 | 350 | 0 | 16.56 | 33.44 | 5.74 | 24.44 | 350 | 0.00 |
| 10 | 16.46 | 33.42 | 5.75 | 349 | 10 | 16.46 | 33.42 | 5.75 | 24.45 | 349 | 0.03 |
| 24 | - | 33.46 | 5.75 | | 20 | 16.4 | 33.46 | 5.75 | 24.49 | 345 | 0.07 |
| 49 | 12.59 | 33.37 | 5.27 | 275 | 30 | 16.4 | 33.45 | 5.70 | 24.49 | 346 | 0.10 |
| 73 | - | 33.55 | 3.93 | | 50 | 12.5 | 33.37 | 5.23 | 25.25 | 273 | 0.17 |
| 97 | 10.39 | 33.89 | 2.78 | 198 | 75 | 10.9 | 33.57 | 3.82 | 25.70 | 230 | 0.23 |
| 151 | 9.88 | 34.25 | 1.41 | 163 | 100 | 10.34 | 33.92 | 2.65 | 26.07 | 195 | 0.28 |
| 198 | 9.44 | 34.38 | 0.75 | 146 | 150 | 9.90 | 34.25 | 1.43 | 26.40 | 163 | 0.37 |
| 245 | 8.98 | 34.42 | 0.70 | 136 | 200 | 9.42 | 34.38 | 0.74 | 26.59 | 146 | 0.45 |
| 292 | 8.64 | 34.40 | 0.46 | 133 | 250 | 8.92 | 34.42 | 0.68 | 26.70 | 135 | 0.53 |
| 392 | 7.32 | 34.34 | 0.38 | 118 | 300 | 8.60 | 34.39 | 0.44 | 26.72 | 133 | 0.60 |
| 488 | 6.48 | 34.36 | 0.30 | 106 | 400 | 7.26 | 34.34 | 0.38 | 26.88 | 118 | 0.73 |
| 593 | 5.79 | 34.36 | 0.27 | 98 | 500 | 6.38 | 34.36 | 0.30 | 27.02 | 105 | 0.84 |
| | | | | | 600 | (5.75) | (34.36) | (0.27) | (27.10) | (97) | (0.95) |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

120.60 SPENCER F. BAIRD; May 20, 1952; 2145 GCT; 27°15'N, 116°32'W; sounding, 2050 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 24°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.79 | 33.33 | 6.00 | 341 | 0 | 15.79 | 33.33 | 6.00 | 24.53 | 341 | 0.00 |
| 8 | 15.41 | 33.33 | 6.23 | 333 | 10 | 15.4 | 33.33 | 6.21 | 24.62 | 333 | 0.03 |
| 23 | - | 33.33 | 5.96 | | 20 | 15.4 | 33.33 | 5.98 | 24.62 | 333 | 0.07 |
| 45 | - | 33.24 | 6.00 | | 30 | 15.4 | 33.31 | 5.96 | 24.60 | 334 | 0.10 |
| 69 | - | 33.35 | 4.97 | | 50 | 13.2 | 33.24 | 5.98 | 25.01 | 296 | 0.16 |
| 91 | - | 33.69 | 3.44 | | 75 | 11.3 | 33.45 | 4.10 | 25.54 | 246 | 0.23 |
| 140 | 10.20 | 33.98 | 2.55 | 188 | 100 | 11.1 | 33.76 | 3.28 | 25.81 | 219 | 0.29 |
| 180 | 9.94 | 34.18 | 1.74 | 169 | 150 | 10.13 | 34.04 | 2.36 | 26.20 | 182 | 0.39 |
| 222 | - | 34.32 | 1.10 | | 200 | 9.82 | 34.25 | 1.38 | 26.42 | 162 | 0.48 |
| 260 | 9.32 | 34.40 | 0.73 | 143 | 250 | 9.43 | 34.38 | 0.82 | 26.58 | 146 | 0.56 |
| 346 | 8.32 | 34.40 | 0.49 | 128 | 300 | 8.89 | 34.42 | 0.54 | 26.70 | 135 | 0.63 |
| 427 | 7.34 | 34.34 | 0.37 | 119 | 400 | 7.67 | 34.35 | 0.42 | 26.83 | 123 | 0.77 |
| 512 | 6.48 | 34.36 | 0.28 | 106 | 500 | 6.57 | 34.35 | 0.29 | 26.99 | 108 | 0.89 |
| 684 | 5.34 | 34.40 | 0.29 | 89 | 600 | 5.83 | 34.38 | 0.29 | 27.11 | 97 | 1.00 |
| 858 | 4.52 | 34.45 | 0.38 | 77 | 700 | 5.28 | 34.41 | 0.28 | 27.20 | 88 | 1.10 |
| 1053 | 3.86 | 34.51 | 0.72 | 66 | 800 | 4.80 | 34.43 | 0.31 | 27.27 | 81 | 1.19 |
| | | | | | 1000 | 4.00 | 34.49 | 0.60 | 27.40 | 69 | 1.36 |

120.70 SPENCER F. BAIRD; May 21, 1952; 0247 GCT; 26°52.5'N, 117°11'W; sounding, 2100 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.45 | 33.44 | 5.97 | 370 | 0 | 17.45 | 33.44 | 5.97 | 24.23 | 370 | 0.00 |
| 9 | 17.38 | 33.44 | 5.45 | 368 | 10 | 17.4 | 33.44 | 5.46 | 24.24 | 369 | 0.04 |
| 23 | - | 33.48 | 5.71 | | 20 | 17.4 | 33.48 | 5.64 | 24.27 | 366 | 0.07 |
| 52 | 15.21 | 33.42 | 5.97 | 322 | 30 | 17.4 | 33.47 | 5.84 | 24.27 | 367 | 0.11 |
| 76 | - | 33.39 | 5.84 | | 50 | 15.6 | 33.43 | 5.97 | 24.65 | 330 | 0.18 |
| 104 | 12.33 | 33.46 | 4.65 | 263 | 75 | 14.5 | 33.39 | 5.84 | 24.86 | 310 | 0.26 |
| 153 | 10.22 | 33.91 | 2.94 | 194 | 100 | 12.9 | 33.43 | 4.90 | 25.22 | 276 | 0.33 |
| 204 | 9.43 | 34.18 | 2.10 | 161 | 150 | 10.31 | 33.89 | 3.01 | 26.05 | 197 | 0.45 |
| 259 | 9.05 | 34.33 | 1.24 | 144 | 200 | 9.48 | 34.15 | 2.17 | 26.40 | 164 | 0.55 |
| 306 | 8.42 | 34.31 | 1.13 | 136 | 250 | 9.14 | 34.33 | 1.32 | 26.59 | 145 | 0.63 |
| 414 | 7.10 | 34.31 | 0.51 | 118 | 300 | 8.51 | 34.31 | 1.13 | 26.68 | 137 | 0.70 |
| 521 | 6.14 | 34.34 | 0.44 | 103 | 400 | 7.28 | 34.31 | 0.55 | 26.86 | 120 | 0.83 |
| 631 | 5.50 | 34.38 | 0.36 | 93 | 500 | 6.32 | 34.33 | 0.46 | 27.00 | 106 | 0.95 |
| | | | | | 600 | 5.64 | 34.37 | 0.39 | 27.12 | 95 | 1.06 |

120.80 SPENCER F. BAIRD; May 21, 1952; 0720 GCT; 26°32'N, 117°48'W; sounding, 2200 fm; wind, 270°, force 3; weather, overcast; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.27 | 33.44 | 5.54 | 366 | 0 | 17.27 | 33.44 | 5.54 | 24.27 | 366 | 0.00 |
| 9 | 17.21 | 33.46 | 5.60 | 363 | 10 | 17.2 | 33.46 | 5.60 | 24.31 | 363 | 0.04 |
| 24 | - | 33.41 | 5.64 | | 20 | 17.2 | 33.41 | 5.63 | 24.27 | 366 | 0.07 |
| 48 | - | 33.53 | 5.86 | | 30 | 17.2 | 33.42 | 5.69 | 24.28 | 366 | 0.11 |
| 72 | - | 33.46 | 5.87 | | 50 | 16.6 | 33.53 | 5.87 | 24.50 | 344 | 0.18 |
| 96 | - | 33.40 | 5.79 | | 75 | 15.3 | 33.45 | 5.86 | 24.73 | 322 | 0.26 |
| 145 | 11.23 | 33.46 | 3.77 | 244 | 100 | 13.9 | 33.40 | 5.71 | 24.99 | 297 | 0.34 |
| 190 | 10.20 | 33.68 | 2.46 | 210 | 150 | 11.07 | 33.47 | 3.61 | 25.59 | 240 | 0.48 |
| 235 | - | 34.33 | 1.19 | | 200 | 10.09 | 34.08 | 2.03 | 26.24 | 179 | 0.59 |
| 279 | 9.51 | 34.38 | 0.93 | 147 | 250 | 9.70 | 34.36 | 1.06 | 26.52 | 152 | 0.67 |
| 373 | 8.12 | 34.33 | 0.55 | 130 | 300 | 9.33 | 34.38 | 0.81 | 26.60 | 145 | 0.75 |
| 466 | 6.48 | 34.27 | 0.60 | 113 | 400 | 7.44 | 34.31 | 0.57 | 26.83 | 122 | 0.89 |
| 562 | 5.92 | 34.33 | 0.27 | 101 | 500 | 6.28 | 34.29 | 0.48 | 26.98 | 109 | 1.01 |
| 751 | 4.80 | 34.38 | 0.38 | 85 | 600 | 5.70 | 34.36 | 0.28 | 27.11 | 97 | 1.12 |
| 942 | 4.15 | 34.42 | 0.54 | 75 | 700 | 5.06 | 34.37 | 0.33 | 27.19 | 89 | 1.22 |
| 1142 | 3.62 | 34.51 | 0.74 | 63 | 800 | 4.62 | 34.39 | 0.41 | 27.26 | 82 | 1.31 |
| | | | | | 1000 | 4.03 | 34.44 | 0.60 | 27.36 | 73 | 1.48 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

SPENCER F. BAIRD; May 21, 1952; 1205 GCT; 26°13'N, 118°28'W; sounding, 2200 fm; wind, 270°, force 2; weather, overcast; sea, slight; wire angle, 07°. 120.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.00 | 33.68 | 5.52 | 365 | 0 | 18.00 | 33.68 | 5.52 | 24.28 | 365 | 0.00 |
| 10 | 18.00 | 33.68 | 5.51 | 365 | 10 | 18.00 | 33.68 | 5.51 | 24.28 | 365 | 0.04 |
| 25 | - | 33.73 | 5.60 | | 20 | 17.9 | 33.73 | 5.55 | 24.34 | 359 | 0.07 |
| 50 | 16.81 | 33.66 | 5.75 | 339 | 30 | 17.8 | 33.73 | 5.64 | 24.37 | 357 | 0.11 |
| 74 | - | 33.82 | 5.68 | | 50 | 16.81 | 33.66 | 5.75 | 24.55 | 339 | 0.18 |
| 99 | 13.53 | 33.39 | 5.61 | 291 | 75 | 16.3 | 33.82 | 5.68 | 24.79 | 316 | 0.26 |
| 152 | 10.92 | 33.60 | 4.20 | 228 | 100 | 13.34 | 33.39 | 5.60 | 25.10 | 287 | 0.34 |
| 201 | 9.88 | 34.02 | 2.88 | 180 | 150 | 10.99 | 33.58 | 4.30 | 25.69 | 231 | 0.47 |
| 249 | 9.08 | 34.16 | 2.24 | 157 | 200 | 9.90 | 34.01 | 2.90 | 26.22 | 181 | 0.57 |
| 299 | 8.75 | 34.31 | 1.19 | 141 | 250 | 9.07 | 34.16 | 2.21 | 26.47 | 157 | 0.66 |
| 402 | 7.67 | 34.38 | 0.59 | 120 | 300 | 8.74 | 34.31 | 1.18 | 26.64 | 141 | 0.74 |
| 500 | 6.62 | 34.33 | 0.36 | 110 | 400 | 7.71 | 34.38 | 0.59 | 26.85 | 121 | 0.87 |
| 607 | 5.86 | 34.36 | 0.29 | 98 | 500 | 6.62 | 34.33 | 0.36 | 26.96 | 110 | 1.00 |
| | | | | | 600 | 5.89 | 34.36 | 0.30 | 27.08 | 99 | 1.11 |

SPENCER F. BAIRD; May 19, 1952; 0800 GCT; 27°24'N, 114°40'W; sounding, 36 fm; wind, 270°, force 3; weather, clear; sea, slight; wire angle, 10°. 123.37

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.78 | 33.78 | 5.25 | 267 | 0 | 13.78 | 33.78 | 5.25 | 25.31 | 267 | 0.00 |
| 10 | 13.64 | 33.78 | 5.24 | 264 | 10 | 13.64 | 33.78 | 5.24 | 25.34 | 264 | 0.03 |
| 19 | 13.09 | 33.77 | 4.81 | 255 | 20 | 13.08 | 33.77 | 4.80 | 25.44 | 254 | 0.05 |
| 29 | 12.28 | 33.75 | 4.00 | 241 | 30 | 12.26 | 33.75 | 3.94 | 25.59 | 241 | 0.08 |
| 39 | 11.70 | 33.77 | 3.34 | 229 | 50 | (11.08) | (33.87) | | (25.90) | (211) | (0.12) |
| 48 | 11.18 | 33.86 | 2.75 | 213 | | | | | | | |

SPENCER F. BAIRD; May 19, 1952; 0539 GCT; 27°18'N, 114°51'W; sounding, 340 fm; wind, 340°, force 4; weather, clear; sea, rough; wire angle, 50°. 123.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.78 | 33.51 | 6.08 | 307 | 0 | 14.78 | 33.51 | 6.08 | 24.89 | 307 | 0.00 |
| 8 | 14.68 | 33.52 | 6.09 | 304 | 10 | 14.6 | 33.52 | 6.10 | 24.94 | 303 | 0.03 |
| 17 | - | 33.52 | 6.14 | | 20 | 14.6 | 33.52 | 6.12 | 24.94 | 303 | 0.06 |
| 33 | 13.00 | 33.49 | 5.31 | 273 | 30 | 14.6 | 33.49 | 5.96 | 24.92 | 305 | 0.09 |
| 49 | - | 33.56 | 4.00 | | 50 | 11.3 | 33.56 | 3.93 | 25.62 | 238 | 0.15 |
| 59 | 11.14 | 33.62 | 3.81 | 230 | 75 | 10.92 | 33.97 | 2.55 | 26.01 | 201 | 0.20 |
| 84 | 10.79 | 34.02 | 2.45 | 195 | 100 | 10.29 | 34.08 | 2.30 | 26.20 | 182 | 0.25 |
| 106 | 10.23 | 34.10 | 2.23 | 180 | 150 | 11.02 | 34.50 | 0.76 | 26.40 | 163 | 0.34 |
| 129 | 10.70 | 34.29 | 1.41 | 173 | 200 | 10.53 | 34.56 | 0.42 | 26.54 | 151 | 0.42 |
| 154 | 11.06 | 34.52 | 0.70 | 163 | 250 | 10.15 | 34.55 | 0.33 | 26.59 | 145 | 0.49 |
| 183 | 10.68 | 34.56 | 0.54 | 153 | 300 | (9.60) | (34.52) | (0.32) | (26.66) | (138) | (0.57) |
| 216 | 10.44 | 34.56 | 0.37 | 149 | | | | | | | |
| 296 | 9.64 | 34.52 | 0.33 | 139 | | | | | | | |

SPENCER F. BAIRD; May 19, 1952; 0103 GCT; 26°58'N, 115°30.5'W; sounding, 1990 fm; wind, 300°, force 4; weather, cloudy; sea, moderate; wire angle, 20°. 123.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.82 | 33.41 | 5.70 | 358 | 0 | 16.82 | 33.41 | 5.70 | 24.36 | 358 | 0.00 |
| 9 | 16.76 | 33.44 | 5.66 | 354 | 10 | 16.7 | 33.44 | 5.67 | 24.41 | 353 | 0.04 |
| 23 | - | 33.40 | 5.76 | | 20 | 16.6 | 33.40 | 5.73 | 24.40 | 354 | 0.07 |
| 52 | 14.83 | 33.40 | 5.90 | 316 | 30 | 16.6 | 33.40 | 5.80 | 24.40 | 354 | 0.11 |
| 75 | - | 33.28 | 5.99 | | 50 | 14.9 | 33.40 | 5.88 | 24.78 | 317 | 0.17 |
| 102 | 11.55 | 33.44 | 4.47 | 251 | 75 | 13.2 | 33.28 | 5.99 | 25.04 | 293 | 0.25 |
| 152 | 10.09 | 34.05 | 2.63 | 181 | 100 | 11.7 | 33.40 | 4.60 | 25.42 | 256 | 0.32 |
| 200 | 9.48 | 34.29 | 1.46 | 154 | 150 | 10.12 | 34.02 | 2.68 | 26.19 | 184 | 0.43 |
| 254 | 8.94 | 34.38 | 0.88 | 139 | 200 | 9.48 | 34.29 | 1.46 | 26.50 | 154 | 0.52 |
| 298 | 8.84 | 34.47 | 0.41 | 130 | 250 | 8.97 | 34.37 | 0.91 | 26.65 | 140 | 0.59 |
| 406 | 7.86 | 34.45 | 0.29 | 118 | 300 | 8.83 | 34.47 | 0.40 | 26.75 | 130 | 0.66 |
| 510 | 6.71 | 34.47 | 0.24 | 101 | 400 | 7.91 | 34.44 | 0.29 | 26.87 | 119 | 0.79 |
| 619 | 5.88 | 34.43 | 0.25 | 93 | 500 | 6.81 | 34.47 | 0.25 | 27.05 | 102 | 0.91 |
| | | | | | 600 | 5.98 | 34.44 | 0.25 | 27.13 | 94 | 1.02 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| **123.60** | SPENCER F. BAIRD; May 18, 1952; 1912 GCT; 26°40'N, 116°14'W; sounding, 2000 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | 17.64 | 33.58 | 5.56 | 364 | 0 | 17.64 | 33.58 | 5.56 | 24.29 | 364 | 0.00 |
| 8 | 17.50 | 33.57 | 5.57 | 361 | 10 | 17.5 | 33.57 | 5.57 | 24.32 | 361 | 0.04 |
| 22 | - | 33.58 | 5.58 | | 20 | 17.5 | 33.58 | 5.58 | 24.33 | 361 | 0.07 |
| 49 | 15.97 | 33.58 | 5.90 | 327 | 30 | 17.4 | 33.58 | 5.66 | 24.35 | 358 | 0.11 |
| 72 | - | 33.53 | 5.73 | | 50 | 15.9 | 33.58 | 5.89 | 24.70 | 325 | 0.18 |
| 98 | 13.99 | 33.40 | 5.58 | 299 | 75 | 15.1 | 33.52 | 5.72 | 24.83 | 313 | 0.26 |
| 143 | 10.69 | 33.78 | 3.31 | 211 | 100 | 13.90 | 33.40 | 5.48 | 24.99 | 297 | 0.33 |
| 189 | 9.94 | 34.12 | 2.14 | 174 | 150 | 10.55 | 33.86 | 3.10 | 25.99 | 203 | 0.46 |
| 240 | 9.11 | 34.25 | 1.42 | 151 | 200 | 9.79 | 34.16 | 1.95 | 26.35 | 168 | 0.56 |
| 283 | 8.75 | 34.27 | 1.03 | 144 | 250 | 9.00 | 34.26 | 1.31 | 26.56 | 148 | 0.64 |
| 384 | 7.74 | 34.36 | 0.52 | 123 | 300 | 8.63 | 34.28 | 0.91 | 26.63 | 141 | 0.71 |
| 485 | 6.74 | 34.35 | 0.35 | 110 | 400 | 7.59 | 34.36 | 0.49 | 26.85 | 121 | 0.85 |
| 591 | 5.99 | 34.40 | 0.27 | 97 | 500 | 6.63 | 34.36 | 0.32 | 26.99 | 108 | 0.97 |
| | | | | | 600 | (5.93) | (34.40) | (0.27) | (27.11) | (96) | (1.08) |
| **127.34** | SPENCER F. BAIRD; May 18, 1952; 0024 GCT; 26°55.5'N, 114°06'W; sounding, 35 fm; wind, 270°, force 4; weather, clear; sea, slight; wire angle, 08°. | | | | | | | | | | |
| 0 | 15.17 | 33.66 | 6.22 | 304 | 0 | 15.17 | 33.66 | 6.22 | 24.92 | 304 | 0.00 |
| 10 | 14.94 | 33.66 | 5.82 | 299 | 10 | 14.94 | 33.66 | 5.82 | 24.97 | 299 | 0.03 |
| 20 | 13.49 | 33.60 | 4.98 | 275 | 20 | 13.49 | 33.60 | 4.98 | 25.23 | 275 | 0.06 |
| 30 | 12.20 | 33.64 | 3.91 | 248 | 30 | 12.20 | 33.64 | 3.91 | 25.52 | 248 | 0.09 |
| 40 | 11.76 | 33.77 | 3.21 | 230 | 50 | 11.34 | 33.89 | 2.72 | 25.87 | 214 | 0.13 |
| 50 | 11.34 | 33.89 | 2.72 | 214 | | | | | | | |
| **127.40** | SPENCER F. BAIRD; May 18, 1952; 0318 GCT; 26°43'N, 114°31.5'W; sounding, 1300 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | 16.12 | 33.49 | 5.93 | 337 | 0 | 16.12 | 33.49 | 5.93 | 24.58 | 337 | 0.00 |
| 8 | 16.04 | 33.48 | 5.87 | 336 | 10 | 16.0 | 33.48 | 5.84 | 24.60 | 335 | 0.03 |
| 22 | - | 33.44 | 5.73 | | 20 | 15.8 | 33.44 | 5.75 | 24.61 | 333 | 0.07 |
| 50 | 11.36 | 33.55 | 4.09 | 239 | 30 | 14.7 | 33.44 | 5.46 | 24.86 | 310 | 0.10 |
| 72 | - | 33.86 | 3.22 | | 50 | 11.36 | 33.55 | 4.09 | 25.60 | 239 | 0.15 |
| 99 | 10.75 | 34.05 | 2.23 | 192 | 75 | 10.8 | 33.88 | 3.12 | 25.96 | 205 | 0.21 |
| 147 | 10.06 | 34.29 | 1.57 | 163 | 100 | 10.74 | 34.06 | 2.22 | 26.11 | 191 | 0.26 |
| 198 | 9.76 | 34.36 | 1.06 | 153 | 150 | 10.03 | 34.29 | 1.52 | 26.41 | 162 | 0.35 |
| 251 | 9.40 | 34.42 | 0.74 | 143 | 200 | 9.73 | 34.36 | 1.03 | 26.52 | 152 | 0.43 |
| 297 | 8.90 | 34.42 | 0.62 | 135 | 250 | 9.40 | 34.42 | 0.74 | 26.62 | 143 | 0.51 |
| 403 | 8.18 | 34.49 | 0.28 | 119 | 300 | 8.88 | 34.42 | 0.61 | 26.70 | 135 | 0.58 |
| 508 | 6.58 | 34.45 | 0.22 | 101 | 400 | 8.20 | 34.49 | 0.29 | 26.86 | 120 | 0.71 |
| 616 | 5.87 | 34.45 | 0.20 | 92 | 500 | 6.67 | 34.45 | 0.23 | 27.05 | 102 | 0.83 |
| | | | | | 600 | 5.92 | 34.45 | 0.20 | 27.15 | 92 | 0.94 |
| **127.50** | SPENCER F. BAIRD; May 18, 1952; 0833 GCT; 26°24'N, 115°08'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 35°. | | | | | | | | | | |
| 0 | 16.80 | 33.42 | 5.65 | 357 | 0 | 16.80 | 33.42 | 5.65 | 24.37 | 357 | 0.00 |
| 8 | 16.71 | 33.44 | 5.66 | 353 | 10 | 16.7 | 33.44 | 5.67 | 24.41 | 353 | 0.04 |
| 21 | - | 33.42 | 5.71 | | 20 | 16.7 | 33.42 | 5.71 | 24.39 | 354 | 0.07 |
| 45 | 15.37 | 33.51 | 5.83 | 319 | 30 | 16.7 | 33.45 | 5.78 | 24.42 | 352 | 0.11 |
| 64 | - | 33.55 | 5.71 | | 50 | 15.3 | 33.52 | 5.82 | 24.79 | 317 | 0.17 |
| 88 | 12.39 | 33.49 | 4.62 | 262 | 75 | 15.0 | 33.52 | 5.24 | 24.85 | 311 | 0.25 |
| 126 | 10.74 | 33.84 | 3.16 | 207 | 100 | 12.15 | 33.52 | 4.14 | 25.43 | 256 | 0.32 |
| 163 | 10.75 | 34.16 | 1.74 | 184 | 150 | 10.74 | 34.05 | 2.24 | 26.10 | 192 | 0.44 |
| 204 | 10.75 | 34.43 | 0.79 | 164 | 200 | 10.74 | 34.41 | 0.88 | 26.38 | 165 | 0.53 |
| 239 | 10.38 | 34.51 | 0.42 | 152 | 250 | 10.19 | 34.51 | 0.40 | 26.56 | 149 | 0.61 |
| 328 | 8.99 | 34.43 | 0.38 | 136 | 300 | 9.38 | 34.46 | 0.39 | 26.65 | 139 | 0.68 |
| 421 | 7.84 | 34.40 | 0.26 | 121 | 400 | 8.09 | 34.40 | 0.26 | 26.81 | 125 | 0.82 |
| 523 | 6.87 | 34.40 | 0.23 | 108 | 500 | 7.07 | 34.40 | 0.24 | 26.96 | 111 | 0.95 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| SPENCER F. BAIRD; May 18, 1952; 1352 GCT; 26°03.5'N, 115°46.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 22°. | | | | | | | | | | | 127.60 |
| 0 | 17.17 | 33.48 | 5.53 | 361 | 0 | 17.17 | 33.48 | 5.53 | 24.33 | 361 | 0.00 |
| 9 | 17.07 | 33.48 | 5.61 | 358 | 10 | 17.1 | 33.48 | 5.61 | 24.35 | 359 | 0.04 |
| 23 | - | 33.46 | 5.60 | | 20 | 17.1 | 33.47 | 5.61 | 24.34 | 360 | 0.07 |
| 46 | 16.67 | 33.42 | 5.68 | 354 | 30 | 17.0 | 33.45 | 5.62 | 24.35 | 359 | 0.11 |
| 69 | - | 33.53 | 5.76 | | 50 | 16.5 | 33.43 | 5.70 | 24.45 | 349 | 0.18 |
| 92 | 14.66 | 33.51 | 5.48 | 305 | 75 | 15.6 | 33.53 | 5.73 | 24.73 | 323 | 0.26 |
| 141 | 11.18 | 33.71 | 3.34 | 224 | 100 | 13.95 | 33.51 | 4.95 | 25.07 | 290 | 0.34 |
| 187 | 9.98 | 34.07 | 2.40 | 178 | 150 | 10.81 | 33.78 | 3.13 | 25.88 | 213 | 0.47 |
| 232 | 9.44 | 34.25 | 1.38 | 156 | 200 | 9.80 | 34.14 | 2.03 | 26.33 | 170 | 0.57 |
| 277 | 9.04 | 34.33 | 0.90 | 144 | 250 | 9.28 | 34.29 | 1.14 | 26.54 | 151 | 0.65 |
| 375 | 7.98 | 34.36 | 0.45 | 126 | 300 | 8.82 | 34.34 | 0.73 | 26.65 | 140 | 0.72 |
| 469 | 6.98 | 34.38 | 0.27 | 111 | 400 | 7.68 | 34.37 | 0.39 | 26.85 | 121 | 0.86 |
| 572 | 6.38 | 34.36 | 0.24 | 105 | 500 | 6.72 | 34.38 | 0.26 | 26.99 | 108 | 0.98 |
| SPENCER F. BAIRD; May 17, 1952; 1941 GCT; 26°29'N, 113°30'W; sounding, 40 fm; wind, 320°, force 1; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | | 130.30 |
| 0 | 16.04 | 33.77 | - | 314 | 0 | 16.04 | 33.77 | | 24.81 | 314 | 0.00 |
| 10 | 15.12 | 33.71 | 5.91 | 299 | 10 | 15.12 | 33.71 | 5.91 | 24.97 | 299 | 0.03 |
| 20 | 12.64 | 33.57 | 4.66 | 261 | 20 | 12.64 | 33.57 | 4.66 | 25.38 | 261 | 0.06 |
| 30 | 11.74 | 33.55 | 4.17 | 246 | 30 | 11.74 | 33.55 | 4.17 | 25.53 | 246 | 0.08 |
| 40 | 11.60 | 33.68 | 3.75 | 234 | 50 | 11.63 | 33.93 | 2.52 | 25.85 | 216 | 0.13 |
| 50 | 11.63 | 33.93 | 2.52 | 216 | | | | | | | |
| SPENCER F. BAIRD; May 17, 1952; 1729 GCT; 26°19.5'N, 113°48.5'W; sounding, 100 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 20°. | | | | | | | | | | | 130.35 |
| 0 | 15.90 | 33.44 | 5.90 | 336 | 0 | 15.90 | 33.44 | 5.90 | 24.59 | 336 | 0.00 |
| 9 | 15.76 | 33.44 | 5.96 | 333 | 10 | 15.75 | 33.44 | 5.96 | 24.63 | 332 | 0.03 |
| 23 | 15.73 | 33.44 | 5.96 | 332 | 20 | 15.74 | 33.44 | 5.96 | 24.63 | 332 | 0.07 |
| 46 | 14.29 | 33.47 | 5.84 | 300 | 30 | 15.71 | 33.44 | 5.93 | 24.63 | 331 | 0.10 |
| 69 | 12.10 | 33.49 | 4.54 | 257 | 50 | 13.70 | 33.47 | 5.80 | 25.09 | 288 | 0.16 |
| 92 | 11.38 | 33.95 | 2.84 | 210 | 75 | 11.80 | 33.51 | 3.75 | 25.49 | 250 | 0.23 |
| 115 | 11.28 | 34.13 | 2.20 | 195 | 100 | 11.33 | 34.04 | 2.62 | 25.99 | 203 | 0.29 |
| 143 | 11.07 | 34.38 | 1.04 | 173 | 150 | (11.00) | (34.40) | (1.03) | (26.33) | (170) | (0.38) |
| SPENCER F. BAIRD; May 17, 1952; 1247 GCT; 26°01'N, 114°23'W; sounding, 1200 fm; wind, 290°, force 3; weather, overcast; sea, moderate; wire angle, 18°. | | | | | | | | | | | 130.40 |
| 0 | 16.47 | 33.62 | 5.74 | 335 | 0 | 16.47 | 33.62 | 5.74 | 24.60 | 335 | 0.00 |
| 9 | 16.36 | 33.62 | 5.72 | 332 | 10 | 16.3 | 33.62 | 5.72 | 24.64 | 331 | 0.03 |
| 23 | - | 33.62 | 5.72 | | 20 | 16.3 | 33.62 | 5.72 | 24.64 | 331 | 0.07 |
| 47 | - | 33.69 | 4.27 | | 30 | 15.5 | 33.63 | 5.50 | 24.83 | 313 | 0.10 |
| 71 | - | 33.84 | 3.05 | | 50 | 12.9 | 33.70 | 4.07 | 25.43 | 256 | 0.16 |
| 95 | - | 34.06 | 2.12 | | 75 | 11.2 | 33.87 | 2.84 | 25.88 | 213 | 0.21 |
| 146 | 10.54 | 34.65u | 0.95 | | 100 | 11.0 | 34.10 | 1.98 | 26.09 | 193 | 0.27 |
| 191 | 10.00 | 34.43 | 0.78 | 152 | 150 | 10.45 | 34.37 | 0.93 | 26.40 | 163 | 0.36 |
| 237 | - | 34.51 | 0.58 | | 200 | 9.93 | 34.44 | 0.72 | 26.55 | 150 | 0.44 |
| 281 | 9.32 | 34.51 | 0.41 | 135 | 250 | 9.55 | 34.51 | 0.52 | 26.66 | 138 | 0.51 |
| 377 | 8.13 | 34.47 | 0.32 | 120 | 300 | 9.17 | 34.51 | 0.38 | 26.73 | 133 | 0.58 |
| 468 | 6.98 | 34.47 | 0.25 | 104 | 400 | 7.81 | 34.47 | 0.30 | 26.91 | 116 | 0.71 |
| 565 | 6.23 | 34.43 | 0.22 | 98 | 500 | 6.69 | 34.46 | 0.24 | 27.06 | 101 | 0.83 |
| 754 | 5.03 | 34.49 | 0.30 | 79 | 600 | 6.01 | 34.43 | 0.23 | 27.12 | 95 | 0.93 |
| 942 | 4.30 | 34.49 | 0.48 | 72 | 700 | 5.37 | 34.48 | 0.27 | 27.24 | 84 | 1.03 |
| 1142 | 3.74 | 34.52 | 0.68 | 64 | 800 | 4.82 | 34.49 | 0.33 | 27.31 | 77 | 1.12 |
| | | | | | 1000 | 4.14 | 34.49 | 0.53 | 27.39 | 70 | 1.28 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

130.50 SPENCER F. BAIRD; May 17, 1952; 0630 GCT; 25°38'N, 115°05'W; sounding, 2000 fm; wind, 320°, force 2; weather, clear; sea, slight; wire angle, 35°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.86 | 33.44 | 5.58 | 357 | 0 | 16.86 | 33.44 | 5.58 | 24.37 | 357 | 0.00 |
| 8 | 16.76 | 33.42 | 5.62 | 356 | 10 | 16.7 | 33.42 | 5.65 | 24.39 | 354 | 0.04 |
| 20 | - | 33.39 | 5.71 | | 20 | 16.7 | 33.39 | 5.71 | 24.37 | 357 | 0.07 |
| 41 | 16.65 | 33.39 | 5.68 | 356 | 30 | 16.7 | 33.39 | 5.70 | 24.37 | 357 | 0.11 |
| 63 | - | 33.39 | 5.91 | | 50 | 16.4 | 33.39 | 5.79 | 24.44 | 350 | 0.18 |
| 82 | 14.05 | 33.39 | 5.63 | 301 | 75 | 14.8 | 33.39 | 5.77 | 24.80 | 316 | 0.26 |
| 125 | 10.71 | 33.64 | 3.51 | 222 | 100 | 12.18 | 33.40 | 5.22 | 25.33 | 265 | 0.33 |
| 165 | 11.00 | 34.16 | 1.64 | 188 | 150 | 10.91 | 33.96 | 2.19 | 26.00 | 201 | 0.45 |
| 205 | 10.86 | 34.40 | 0.89 | 168 | 200 | 10.88 | 34.40 | 0.92 | 26.35 | 168 | 0.55 |
| 244 | 9.79 | 34.33 | 1.07 | 156 | 250 | 9.69 | 34.33 | 1.07 | 26.50 | 154 | 0.63 |
| 331 | 8.63 | 34.40 | 0.58 | 133 | 300 | 8.94 | 34.37 | 0.80 | 26.65 | 139 | 0.71 |
| 418 | 8.00 | 34.43 | 0.23 | 121 | 400 | 8.11 | 34.43 | 0.27 | 26.83 | 123 | 0.84 |
| 503 | 7.00 | 34.47 | 0.22 | 105 | 500 | 7.06 | 34.47 | 0.23 | 27.01 | 105 | 0.97 |

130.60 SPENCER F. BAIRD; May 17, 1952; 0007 GCT; 25°17'N, 115°48'W; sounding, 1700 fm; wind, 270°, force 3; weather, overcast; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.35 | 33.42 | 5.48 | 369 | 0 | 17.35 | 33.42 | 5.48 | 24.24 | 369 | 0.00 |
| 9 | 17.08 | 33.44 | 5.71 | 361 | 10 | 17.1 | 33.44 | 5.71 | 24.32 | 362 | 0.04 |
| 22 | - | 33.44 | 5.69 | | 20 | 16.9 | 33.44 | 5.69 | 24.36 | 357 | 0.07 |
| 49 | - | 33.86 | 5.68 | | 30 | 16.9 | 33.45 | 5.68 | 24.37 | 357 | 0.11 |
| 73 | - | 33.69 | 5.71 | | 50 | 17.0 | 33.86 | 5.68 | 24.66 | 329 | 0.18 |
| 97 | - | 33.53 | 5.71 | | 75 | 16.1 | 33.67 | 5.71 | 24.72 | 323 | 0.26 |
| 149 | 10.57 | 33.87 | 3.18 | 202 | 100 | 13.9 | 33.53 | 5.70 | 25.09 | 288 | 0.34 |
| 194 | 9.49 | 34.09 | 2.38 | 169 | 150 | 10.52 | 33.87 | 3.15 | 26.00 | 201 | 0.46 |
| 242 | - | 34.34 | 1.10 | | 200 | 9.47 | 34.11 | 2.26 | 26.37 | 167 | 0.55 |
| 288 | 8.90 | 34.34 | 0.94 | 141 | 250 | 9.19 | 34.34 | 1.09 | 26.59 | 145 | 0.63 |
| 387 | 7.79 | 34.36 | 0.47 | 123 | 300 | 8.76 | 34.34 | 0.87 | 26.66 | 139 | 0.71 |
| 483 | 7.01 | 34.40 | 0.32 | 110 | 400 | 7.69 | 34.37 | 0.43 | 26.85 | 121 | 0.84 |
| 581 | 6.24 | 34.42 | 0.20 | 99 | 500 | 6.89 | 34.40 | 0.30 | 26.98 | 108 | 0.97 |
| 777 | 5.14 | 34.49 | 0.28 | 80 | 600 | 6.10 | 34.43 | 0.20 | 27.11 | 96 | 1.08 |
| 970 | 4.28 | 34.51 | 0.49 | 70 | 700 | 5.52 | 34.47 | 0.22 | 27.22 | 86 | 1.18 |
| 1172 | 3.68 | 34.54 | 0.70 | 62 | 800 | 5.03 | 34.49 | 0.30 | 27.29 | 79 | 1.27 |
| | | | | | 1000 | 4.17 | 34.51 | 0.51 | 27.40 | 69 | 1.43 |

133.25 SPENCER F. BAIRD; May 16, 1952; 0053 GCT; 26°05'N, 112°48'W; sounding, 45 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 13°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.98 | 33.71 | 6.29 | 340 | 0 | 16.98 | 33.71 | 6.29 | 24.55 | 340 | 0.00 |
| 10 | 16.12 | 33.73 | 6.58 | 319 | 10 | 16.12 | 33.73 | 6.58 | 24.76 | 319 | 0.03 |
| 19 | 14.36 | 33.78 | 5.42 | 279 | 20 | 14.25 | 33.78 | 5.41 | 25.21 | 276 | 0.06 |
| 29 | 12.78 | 33.75 | 3.98 | 250 | 30 | 12.70 | 33.75 | 3.92 | 25.50 | 249 | 0.09 |
| 39 | 11.88 | 33.80 | 2.89 | 230 | 50 | (12.45) | (34.12) | | (25.84) | (217) | (0.14) |
| 48 | 12.40 | 34.11 | 1.46 | 217 | | | | | | | |

133.30 SPENCER F. BAIRD; May 16, 1952; 0342 GCT; 25°54'N, 113°07'W; sounding, 105 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.18 | 33.75 | 6.18 | 319 | 0 | 16.18 | 33.75 | 6.18 | 24.77 | 319 | 0.00 |
| 8 | 16.06 | 33.75 | 6.18 | 316 | 10 | 16.00 | 33.75 | 6.17 | 24.81 | 315 | 0.03 |
| 22 | 15.18 | 33.75 | 6.06 | 298 | 20 | 15.40 | 33.75 | 6.07 | 24.94 | 302 | 0.06 |
| 44 | 12.64 | 33.82 | 3.60 | 242 | 30 | 14.21 | 33.76 | 5.60 | 25.21 | 277 | 0.09 |
| 67 | 11.50 | 34.00 | 2.46 | 209 | 50 | 12.20 | 33.84 | 3.30 | 25.67 | 233 | 0.14 |
| 88 | 11.35 | 34.42 | 1.13 | 175 | 75 | 11.40 | 34.28 | 2.00 | 26.16 | 186 | 0.20 |
| 111 | 11.40 | 34.54 | 0.53 | 167 | 100 | 11.39 | 34.50 | 0.64 | 26.33 | 170 | 0.24 |
| 137 | 11.04 | 34.58 | 0.47 | 158 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

SPENCER F. BAIRD; May 16, 1952; 0924, 0955 GCT; 25°34.5'N, 113°45'W; sounding, 800 fm; wind, 270°, force 4; weather, clear; sea, rough; wire angle, 24°, 30°. 133.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.34 | 33.68 | 5.51 | 350 | 0 | 17.34 | 33.68 | 5.51 | 24.44 | 350 | 0.00 |
| 8 | 17.26 | 33.66 | 5.58 | 349 | 10 | 17.3 | 33.66 | 5.57 | 24.44 | 350 | 0.04 |
| 23 | - | 33.69 | 5.57 | | 20 | 17.3 | 33.67 | 5.57 | 24.44 | 350 | 0.07 |
| 51 | 16.73 | 33.91 | 5.64 | 319 | 30 | 17.4 | 33.76 | 5.57 | 24.49 | 345 | 0.10 |
| 74 | - | 33.82 | 5.23 | | 50 | 16.8 | 33.91 | 5.64 | 24.75 | 321 | 0.17 |
| 100 | 12.39 | 33.78 | 3.62 | 241 | 75 | 15.7 | 33.82 | 5.22 | 24.93 | 304 | 0.25 |
| 148 | 10.72 | 34.05 | 2.25 | 192 | 100 | 12.39 | 33.78 | 3.62 | 25.59 | 241 | 0.32 |
| 195 | 10.56 | 34.38 | 1.18 | 164 | 150 | 10.70 | 34.08 | 2.21 | 26.13 | 189 | 0.43 |
| 247 | 9.99 | 34.51 | 0.50 | 145 | 200 | 10.50 | 34.40 | 1.08 | 26.42 | 162 | 0.52 |
| | | | | | 250 | 9.95 | 34.51 | 0.50 | 26.60 | 145 | 0.60 |
| 276 | 9.67 | 34.52 | 0.46 | 140 | 300 | 9.37 | 34.52 | 0.41 | 26.70 | 135 | 0.67 |
| 380 | 8.42 | 34.51 | 0.28 | 121 | 400 | 8.19 | 34.51 | 0.26 | 26.88 | 118 | 0.80 |
| 482 | 7.26 | 34.49 | 0.19 | 107 | 500 | 7.07 | 34.48 | 0.19 | 27.02 | 105 | 0.92 |
| 588 | 6.51 | 34.43 | 0.21 | 101 | 600 | (6.47) | (34.42) | | (27.05) | (101) | (1.03) |

SPENCER F. BAIRD; May 16, 1952; 1606 GCT; 25°14.5'N, 114°24'W; sounding, 1700 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 12°. 133.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.34 | 34.07 | 5.51 | 345 | 0 | 18.34 | 34.07 | 5.51 | 24.50 | 345 | 0.00 |
| 10 | 18.24 | 34.07 | 5.51 | 342 | 10 | 18.24 | 34.07 | 5.51 | 24.52 | 342 | 0.03 |
| 25 | - | 34.07 | 5.47 | | 20 | 18.1 | 34.07 | 5.47 | 24.56 | 339 | 0.07 |
| 48 | 16.82 | 33.96 | 5.64 | 318 | 30 | 18.0 | 34.06 | 5.49 | 24.57 | 337 | 0.10 |
| 73 | - | 33.93 | 5.48 | | 50 | 16.4 | 33.96 | 5.64 | 24.88 | 308 | 0.17 |
| 96 | 13.87 | 33.78 | 4.46 | 269 | 75 | 15.9 | 33.93 | 5.42 | 24.97 | 300 | 0.24 |
| 149 | 11.50 | 34.09 | 2.24 | 202 | 100 | 13.50 | 33.78 | 4.24 | 25.37 | 262 | 0.31 |
| 196 | 11.02 | 34.49 | 0.71 | 164 | 150 | 11.49 | 34.12 | 2.19 | 26.02 | 200 | 0.43 |
| 242 | 10.10 | 34.50 | 0.74 | 148 | 200 | 10.97 | 34.49 | 0.71 | 26.40 | 163 | 0.52 |
| 291 | 9.53 | 34.51 | 0.43 | 138 | 250 | 9.99 | 34.50 | 0.72 | 26.58 | 146 | 0.60 |
| 391 | 8.12 | 34.38 | 0.41 | 127 | 300 | 9.40 | 34.51 | 0.42 | 26.69 | 136 | 0.68 |
| 489 | 7.06 | 34.38 | 0.25 | 112 | 400 | 8.01 | 34.38 | 0.40 | 26.81 | 125 | 0.81 |
| 593 | 6.18 | 34.43 | 0.24 | 97 | 500 | 6.93 | 34.38 | 0.25 | 26.96 | 110 | 0.94 |
| | | | | | 600 | (6.12) | (34.43) | (0.24) | (27.11) | (96) | (1.05) |

SPENCER F. BAIRD; May 15, 1952; 2021 GCT; 25°35'N, 112°19'W; sounding, 41 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 10°. 137.23

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.68 | 34.07 | 6.61 | 353 | 0 | 18.68 | 34.07 | 6.61 | 24.41 | 353 | 0.00 |
| 10 | 15.25 | 34.06 | 4.03 | 276 | 10 | 15.25 | 34.06 | 4.03 | 25.21 | 276 | 0.03 |
| 20 | 13.84 | 34.16 | 1.58 | 240 | 20 | 13.84 | 34.16 | 1.58 | 25.59 | 240 | 0.06 |
| 30 | 13.76 | 34.27 | 0.86 | 231 | 30 | 13.76 | 34.27 | 0.86 | 25.69 | 231 | 0.08 |
| 40 | 13.40 | 34.36 | 0.32 | 217 | | | | | | | |
| 49 | 13.22 | 34.38 | 0.22 | 212 | | | | | | | |

SPENCER F. BAIRD; May 15, 1952; 1514, 1535 GCT; 25°07'N, 112°47'W; sounding, 100 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 17°, 33°. 137.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.61 | 33.93 | 5.49 | 361 | 0 | 18.61 | 33.93 | 5.49 | 24.32 | 361 | 0.00 |
| 9 | 17.90 | 33.94 | 5.58 | 344 | 10 | 17.80 | 33.94 | 5.59 | 24.53 | 341 | 0.04 |
| 23 | 16.75 | 33.89 | 5.64 | 321 | 20 | 17.00 | 33.89 | 5.63 | 24.68 | 327 | 0.07 |
| 48 | 13.78 | 33.96 | 5.68 | 254 | 30 | 16.10 | 33.89 | 5.68 | 24.89 | 307 | 0.10 |
| 72 | 13.18 | 34.25 | 1.39 | 221 | 50 | 13.73 | 33.98 | 5.60 | 25.47 | 251 | 0.16 |
| 95 | 12.20 | 34.40 | 0.95 | 192 | 75 | 13.06 | 34.29 | 1.27 | 25.85 | 216 | 0.22 |
| | | | | | 100 | 12.01 | 34.42 | 0.91 | 26.16 | 187 | 0.27 |
| 108 | 11.86 | 34.45 | 0.82 | 182 | | | | | | | |
| 136 | 11.62 | 34.64 | 0.40 | 164 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 137.40 | SPENCER F. BAIRD; May 15, 1952; 0939 GCT; 24°53'N, 113°25'W; sounding, 1200 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | 18.00 | 33.75 | 5.64 | 360 | 0 | 18.00 | 33.75 | 5.64 | 24.34 | 360 | 0.00 |
| 9 | 17.78 | 33.73 | 5.66 | 356 | 10 | 17.7 | 33.73 | 5.66 | 24.39 | 354 | 0.04 |
| 23 | - | 33.62 | 5.81 | | 20 | 17.2 | 33.63 | 5.80 | 24.44 | 350 | 0.07 |
| 48 | 13.56 | 33.80 | 4.06 | 261 | 30 | 16.9 | 33.66 | 5.60 | 24.53 | 341 | 0.11 |
| 72 | - | 33.86 | 3.00 | | 50 | 13.4 | 33.81 | 3.97 | 25.41 | 258 | 0.17 |
| 93 | 11.37 | 34.04 | 2.10 | 203 | 75 | 11.8 | 33.88 | 2.88 | 25.78 | 223 | 0.23 |
| 143 | 10.98 | 34.36 | 1.19 | 173 | 100 | 11.29 | 34.10 | 1.93 | 26.04 | 198 | 0.28 |
| 187 | 10.46 | 34.47 | 0.72 | 156 | 150 | 10.89 | 34.38 | 1.10 | 26.33 | 170 | 0.37 |
| 233 | 9.83 | 34.48 | 0.62 | 145 | 200 | 10.28 | 34.48 | 0.70 | 26.52 | 152 | 0.46 |
| 278 | 8.98 | 34.40 | 0.56 | 138 | 250 | 9.50 | 34.45 | 0.60 | 26.63 | 142 | 0.53 |
| 375 | 8.11 | 34.47 | 0.33 | 120 | 300 | 8.74 | 34.41 | 0.50 | 26.72 | 133 | 0.60 |
| 472 | 7.12 | 34.40 | 0.30 | 111 | 400 | 7.85 | 34.45 | 0.31 | 26.88 | 118 | 0.73 |
| 575 | 6.28 | 34.40 | 0.25 | 101 | 500 | 6.88 | 34.40 | 0.29 | 26.98 | 108 | 0.85 |
| 137.50 | SPENCER F. BAIRD; May 15, 1952; 0338, 0418 GCT; 24°40'N, 114°01.5'W; sounding, 1500 fm; wind, 300°, force 2; weather, overcast; sea, slight; wire angle, 18°, 16°. | | | | | | | | | | |
| 0 | 18.21 | 33.60 | 5.34 | 376 | 0 | 18.21 | 33.60 | 5.34 | 24.17 | 376 | 0.00 |
| 9 | 17.76 | 33.57 | 5.59 | 367 | 10 | 17.8 | 33.57 | 5.59 | 24.25 | 368 | 0.04 |
| 23 | - | 33.64 | 5.50 | | 20 | 17.5 | 33.63 | 5.50 | 24.37 | 357 | 0.07 |
| 47 | 16.07 | 33.66 | 5.60 | 323 | 30 | 17.2 | 33.65 | 5.52 | 24.45 | 349 | 0.11 |
| 71 | - | 33.57 | 5.28 | | 50 | 15.9 | 33.66 | 5.59 | 24.76 | 319 | 0.18 |
| | | | | | 75 | 14.8 | 33.58 | 5.02 | 24.94 | 302 | 0.25 |
| 94 | 12.99 | 33.93 | 2.98 | 241 | 100 | 12.82 | 34.01 | 2.60 | 25.68 | 232 | 0.32 |
| 147 | 12.12 | 34.42 | 0.97 | 189 | 150 | 12.04 | 34.44 | 0.90 | 26.17 | 186 | 0.43 |
| 194 | 11.39 | 34.58 | 0.41 | 164 | 200 | 11.33 | 34.59 | 0.39 | 26.42 | 162 | 0.52 |
| 242 | 10.80 | 34.59 | 0.29 | 153 | 250 | 10.68 | 34.58 | 0.28 | 26.53 | 152 | 0.60 |
| 290 | 9.76 | 34.51 | 0.28 | 142 | 300 | 9.63 | 34.50 | 0.28 | 26.64 | 140 | 0.67 |
| 390 | 8.56 | 34.47 | 0.24 | 126 | 400 | 8.42 | 34.47 | 0.24 | 26.81 | 124 | 0.81 |
| 487 | 7.36 | 34.45 | 0.19 | 111 | 500 | 7.22 | 34.45 | 0.19 | 26.98 | 109 | 0.94 |
| 591 | 6.50 | 34.45 | 0.17 | 100 | 600 | (6.43) | (34.45) | (0.17) | (27.08) | (99) | (1.05) |
| 50.47 | SPENCER F. BAIRD; June 16, 1952; 0509 GCT; 39°45'N, 123°56'W; sounding, 71 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 32°. | | | | | | | | | | |
| 0 | 9.95 | 33.19 | 6.11 | 243 | 0 | 9.95 | 33.19 | 6.11 | 25.57 | 243 | 0.00 |
| 9 | 9.96 | 33.19 | 5.97 | 243 | 10 | 9.95 | 33.19 | 5.95 | 25.57 | 243 | 0.02 |
| 18 | 9.88 | 33.22 | 5.83 | 239 | 20 | 9.80 | 33.24 | 5.83 | 25.63 | 236 | 0.05 |
| 26 | 9.06 | 33.31 | 5.50 | 220 | 30 | 8.80 | 33.38 | 5.10 | 25.90 | 211 | 0.07 |
| 43 | 8.54 | 33.57 | 3.94 | 193 | 50 | 8.49 | 33.65 | 3.90 | 26.16 | 186 | 0.11 |
| 61 | 8.41 | 33.80 | 3.80 | 174 | 75 | (8.03) | (33.93) | (2.85) | (26.45) | (159) | (0.15) |
| 70 | 8.18 | 33.89 | 3.04 | 164 | | | | | | | |
| 50.50 | SPENCER F. BAIRD; June 16, 1952; 0715 GCT; 39°40.5'N, 124°09'W; sounding, 500 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 45°. | | | | | | | | | | |
| 0 | 10.18 | 33.24 | 5.99 | 242 | 0 | 10.18 | 33.24 | 5.99 | 25.57 | 242 | 0.00 |
| 8 | 10.18 | 33.22 | 5.98 | 244 | 10 | 10.18 | 33.22 | 5.97 | 25.55 | 244 | 0.02 |
| 14 | 10.18 | 33.22 | 5.97 | 244 | 20 | 9.90 | 33.22 | 6.10 | 25.60 | 239 | 0.05 |
| 24 | 9.37 | 33.22 | 6.13 | 231 | 30 | 9.21 | 33.23 | 6.10 | 25.72 | 228 | 0.07 |
| 39 | 9.01 | 33.44 | 5.36 | 209 | 50 | 8.40 | 33.59 | 4.60 | 26.13 | 189 | 0.11 |
| 49 | 8.46 | 33.58 | 4.73 | 191 | 75 | 8.03 | 33.73 | 3.73 | 26.29 | 174 | 0.16 |
| 60 | 8.12 | 33.66 | 3.97 | 180 | 100 | 7.98 | 33.91 | 3.00 | 26.44 | 160 | 0.20 |
| 76 | 8.03 | 33.73 | 3.72 | 174 | 150 | 7.75 | 34.05 | 2.20 | 26.59 | 146 | 0.28 |
| 92 | 7.98 | 33.84 | 3.30 | 165 | 200 | 7.11 | 34.07 | 1.85 | 26.69 | 136 | 0.35 |
| 101 | 7.99 | 33.91 | 2.88 | 160 | 250 | 6.74 | 34.11 | 1.29 | 26.77 | 128 | 0.42 |
| 128 | 7.88 | 33.98 | 2.47 | 153 | 300 | 6.37 | 34.13 | 0.99 | 26.84 | 122 | 0.48 |
| 160 | 7.66 | 34.07 | 2.10 | 143 | 400 | 5.80 | 34.17 | 0.75 | 26.94 | 112 | 0.60 |
| 188 | 7.27 | 34.07 | 1.98 | 138 | | | | | | | |
| 264 | 6.64 | 34.12 | 1.18 | 126 | | | | | | | |
| 349 | 6.00 | 34.14 | 0.86 | 117 | | | | | | | |
| 446 | 5.69 | 34.20 | 0.64 | 108 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| SPENCER F. BAIRD; June 16, 1952; 1308 GCT; 39°17'N, 124°58'W; sounding, 1600 fm; wind, 320°, force 7; weather, partly cloudy; sea, high; wire angle, 34°. | | | | | | | | | | | 50.60 |
| 0 | 12.78 | 32.74 | 6.33 | 324 | 0 | 12.78 | 32.74 | 6.33 | 24.71 | 324 | 0.00 |
| 8 | 12.76 | 32.70 | 6.29 | 327 | 10 | 12.76 | 32.70 | 6.29 | 24.68 | 327 | 0.03 |
| 24 | 12.77 | 32.74 | 6.33 | 324 | 20 | 12.76 | 32.74 | 6.31 | 24.71 | 324 | 0.07 |
| 50 | - | 32.68 | 6.60 | | 30 | 12.76 | 32.73 | 6.40 | 24.70 | 325 | 0.10 |
| 75 | 9.96 | 32.74 | 6.50 | 276 | 50 | 11.60 | 32.68 | 6.60 | 24.88 | 308 | 0.16 |
| 99 | 8.60 | 33.08 | 5.41 | 230 | 75 | 9.96 | 32.74 | 6.50 | 25.22 | 276 | 0.23 |
| 146 | 7.93 | 33.71 | 3.89 | 174 | 100 | 8.57 | 33.09 | 5.41 | 25.71 | 229 | 0.30 |
| 194 | 7.20 | 33.86 | 3.52 | 153 | 150 | 7.89 | 33.74 | 3.83 | 26.32 | 171 | 0.40 |
| 243 | 6.82 | 33.91 | 3.25 | 144 | 200 | 7.15 | 33.87 | 3.50 | 26.53 | 151 | 0.48 |
| 290 | 6.41 | 33.97 | 2.62 | 134 | 250 | 6.77 | 33.92 | 3.20 | 26.62 | 143 | 0.56 |
| 385 | 5.77 | 34.02 | 1.78 | 123 | 300 | 6.33 | 33.98 | 2.50 | 26.73 | 133 | 0.63 |
| 483 | 5.28 | 34.14 | 1.80 | 108 | 400 | 5.69 | 34.04 | 1.64 | 26.85 | 120 | 0.76 |
| 577 | 4.8 a) | 34.20 | 0.74 | 99 | 500 | 5.19 | 34.15 | 0.94 | 27.00 | 107 | 0.88 |
| 772 | 4.00 | 34.35 | 0.56 | 79 | 600 | 4.64 | 34.22 | 0.72 | 27.12 | 95 | 0.98 |
| 971 | 3.54 | 34.43 | 0.49 | 69 | 700 | 4.22 | 34.31 | 0.60 | 27.24 | 84 | 1.08 |
| 1176 | 3.02 | 34.51 | 0.78 | 58 | 800 | 3.94 | 34.36 | 0.53 | 27.31 | 78 | 1.17 |
| | | | | | 1000 | 3.48 | 34.44 | 0.50 | 27.42 | 67 | 1.33 |
| SPENCER F. BAIRD; June 16, 1952; 0010 GCT; 39°02'N, 123°51'W; sounding, 72 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 18°. | | | | | | | | | | | 53.52 |
| 0 | 10.56 | 33.10 | 5.92 | 259 | 0 | 10.56 | 33.10 | 5.92 | 25.40 | 259 | 0.00 |
| 10 | 10.52 | 33.10 | 6.02 | 258 | 10 | 10.52 | 33.10 | 6.02 | 25.40 | 258 | 0.03 |
| 19 | 9.70 | 33.15 | 5.67 | 242 | 20 | 9.50 | 33.24 | 5.50 | 25.68 | 232 | 0.05 |
| 29 | 8.77 | 33.51 | 4.26 | 201 | 30 | 8.71 | 33.52 | 4.22 | 26.03 | 199 | 0.07 |
| 48 | 8.46 | 33.66 | 3.87 | 185 | 50 | 8.42 | 33.67 | 3.80 | 26.19 | 184 | 0.11 |
| 62 | 8.27 | 33.77 | 3.26 | 174 | 75 | (8.09) | (33.93) | (2.65) | (26.44) | (160) | (0.15) |
| 72 | 8.13 | 33.91 | 2.72 | 162 | | | | | | | |
| SPENCER F. BAIRD; June 15, 1952; 2136 GCT; 38°56'N, 124°04'W; sounding, 1060 fm; wind, 320°, force 7; weather, clear; sea, very high; wire angle, 25°. | | | | | | | | | | | 53.55 |
| 0 | 12.30 | 32.95 | 6.39 | 300 | 0 | 12.30 | 32.95 | 6.39 | 24.96 | 300 | 0.00 |
| 9 | 12.27 | 32.95 | 6.33 | 300 | 10 | 12.28 | 32.95 | 6.35 | 24.97 | 300 | 0.03 |
| 23 | 12.15 | 32.94 | 6.45 | 298 | 20 | 12.21 | 32.94 | 6.40 | 24.97 | 299 | 0.06 |
| 37 | 10.05 | 33.06 | 6.63 | 254 | 30 | 11.44 | 32.97 | 6.58 | 25.14 | 284 | 0.09 |
| 54 | 9.00 | 33.26 | 5.39 | 223 | 50 | 9.18 | 33.22 | 5.60 | 25.72 | 228 | 0.14 |
| 68 | 8.57 | 33.33 | 5.26 | 211 | 75 | 8.55 | 33.38 | 5.00 | 25.94 | 207 | 0.20 |
| 86 | 8.59 | 33.49 | 4.05 | 200 | 100 | 8.36 | 33.67 | 3.65 | 26.20 | 183 | 0.24 |
| 109 | 8.26 | 33.77 | 3.54 | 174 | 150 | 7.89 | 33.89 | 2.95 | 26.44 | 160 | 0.33 |
| 136 | 8.01 | 33.84 | 3.26 | 165 | 200 | 7.37 | 33.99 | 2.47 | 26.59 | 145 | 0.41 |
| 163 | 7.76 | 33.95 | 2.69 | 154 | 250 | 6.89 | 34.01 | 2.07 | 26.68 | 137 | 0.48 |
| 218 | 7.19 | 34.00 | 2.33 | 142 | 300 | 6.48 | 34.03 | 1.60 | 26.75 | 131 | 0.55 |
| 273 | 6.68 | 34.02 | 1.86 | 134 | 400 | 5.72 | 34.10 | 1.05 | 26.90 | 116 | 0.68 |
| 327 | 6.27 | 34.05 | 1.44 | 127 | 500 | 5.15 | 34.18 | 0.64 | 27.03 | 104 | 0.79 |
| 434 | 5.49 | 34.13 | 0.92 | 111 | | | | | | | |
| 550 | 4.98 | 34.22 | 0.53 | 99 | | | | | | | |
| SPENCER F. BAIRD; June 15, 1952; 0045 GCT; 38°30'N, 123°22.5'W; sounding, 56 fm; wind, 310°, force 6; weather, partly cloudy; sea, high; wire angle, 28°. | | | | | | | | | | | 57.51 |
| 0 | 10.74 | - | 5.70 | | 0 | 10.74 | (33.68) | 5.70 | (25.81) | (219) | (0.00) |
| 9 | 10.60 | 33.68 | 5.69 | 217 | 10 | 10.59 | 33.66 | 5.65 | 25.83 | 218 | 0.02 |
| 18 | 10.06 | 33.53 | 5.33 | 219 | 20 | 9.68 | 33.53 | 5.00 | 25.88 | 213 | 0.04 |
| 27 | 9.08 | 33.55 | 4.57 | 202 | 30 | 8.97 | 33.56 | 4.50 | 26.02 | 200 | 0.06 |
| 45 | 8.64 | 33.62 | 4.11 | 191 | 50 | 8.55 | 33.70 | 3.75 | 26.19 | 183 | 0.10 |
| 58 | 8.40 | 33.80 | 3.01 | 174 | | | | | | | |
| 66 | 8.17 | 33.86 | 2.89 | 166 | | | | | | | |

a) Temperature inferred from pressure thermometer and wire depth.

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

57.55 SPENCER F. BAIRD; June 15, 1952; 0319 GCT; 38°22'N, 123°39.5'W; sounding, 600 fm; wind, 320°, force 6; weather, partly cloudy; sea, very high; wire angle, 34°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.66 | 33.03 | 6.28 | 283 | 0 | 11.66 | 33.03 | 6.28 | 25.14 | 283 | 0.00 |
| 8 | 11.61 | 33.03 | 6.20 | 282 | 10 | 11.59 | 33.03 | 6.20 | 25.16 | 282 | 0.03 |
| 21 | 11.27 | 33.06 | 6.19 | 274 | 20 | 11.32 | 33.06 | 6.19 | 25.23 | 275 | 0.06 |
| 33 | 9.49 | 33.12 | 6.07 | 240 | 30 | 9.97 | 33.10 | 6.11 | 25.50 | 249 | 0.08 |
| 50 | 9.28 | 33.26 | 5.23 | 227 | 50 | 9.28 | 33.26 | 5.23 | 25.73 | 227 | 0.13 |
| 61 | 8.61 | 33.39 | 4.46 | 207 | 75 | 8.64 | 33.57 | 3.70 | 26.08 | 194 | 0.18 |
| 78 | 8.64 | 33.60 | 3.60 | 192 | 100 | 8.64 | 33.71 | 3.15 | 26.19 | 184 | 0.23 |
| 99 | 8.64 | 33.71 | 3.18 | 184 | 150 | 8.07 | 33.97 | 2.33 | 26.48 | 156 | 0.32 |
| 123 | 8.36 | 33.86 | 2.84 | 169 | 200 | 8.04 | 34.04 | 1.92 | 26.54 | 151 | 0.40 |
| 146 | 8.08 | 33.96 | 2.40 | 157 | 250 | 7.59 | 34.05 | 1.87 | 26.61 | 144 | 0.47 |
| 193 | 8.04 | 34.04 | 1.95 | 151 | 300 | 6.98 | 34.12 | 1.56 | 26.75 | 130 | 0.54 |
| 240 | 7.71 | 34.04 | 1.90 | 146 | 400 | 6.09 | 34.19 | 0.84 | 26.92 | 114 | 0.67 |
| 288 | 7.11 | 34.11 | 1.65 | 133 | 500 | 5.47 | 34.21 | 0.43 | 27.02 | 105 | 0.78 |
| 383 | 6.21 | 34.18 | 0.91 | 116 | 600 | (5.09) | (34.27) | (0.37) | (27.11) | (96) | (0.89) |
| 486 | 5.54 | 34.20 | 0.48 | 107 | | | | | | | |
| 593 | 5.12 | 34.27 | 0.37 | 97 | | | | | | | |

57.65 SPENCER F. BAIRD; June 15, 1952; 0903, 0937 GCT; 38°02'N, 124°25'W; sounding, 2121 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 45°, 53°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.01 | 33.01 | 6.33 | 291 | 0 | 12.01 | 33.01 | 6.33 | 25.06 | 291 | 0.00 |
| 7 | 12.00 | 33.03 | 6.43 | 289 | 10 | 12.00 | 33.03 | 6.41 | 25.08 | 289 | 0.03 |
| 18 | 11.99 | 33.03 | 6.30 | 289 | 20 | 11.90 | 33.03 | 6.25 | 25.10 | 287 | 0.06 |
| 28 | 10.31 | 33.01 | 6.14 | 262 | 30 | 9.72 | 33.01 | 6.05 | 25.47 | 252 | 0.08 |
| 42 | 9.00 | 33.10 | 5.31 | 235 | 50 | 8.80 | 33.13 | 5.26 | 25.71 | 229 | 0.13 |
| 53 | 8.70 | 33.15 | 5.25 | 226 | 75 | 8.68 | 33.39 | 4.70 | 25.93 | 208 | 0.19 |
| 67 | 8.80 | 33.35 | 4.91 | 213 | 100 | 8.12 | 33.52 | 4.15 | 26.12 | 191 | 0.24 |
| 84 | 8.40 | 33.42 | 4.55 | 202 | 150 | 7.77 | 33.95 | 2.42 | 26.50 | 154 | 0.33 |
| 102 | 8.12 | 33.58 | 4.09 | 186 | 200 | 7.40 | 34.03 | 2.07 | 26.62 | 143 | 0.40 |
| 115 | 8.28 | 33.80 | 3.07 | 172 | 250 | 7.07 | 34.08 | 1.69 | 26.71 | 135 | 0.47 |
| | | | | | 300 | 6.71 | 34.11 | 1.30 | 26.78 | 128 | 0.54 |
| 140 | 7.87 | 33.93 | 2.51 | 157 | 400 | 5.79 | 34.17 | 0.79 | 26.95 | 112 | 0.66 |
| 178 | 7.54 | 34.00 | 2.25 | 147 | 500 | (5.32) | (34.23) | (0.75) | (27.05) | (102) | (0.78) |
| 217 | 7.29 | 34.05 | 1.93 | 140 | | | | | | | |
| 297 | 6.74 | 34.11 | 1.32 | 128 | | | | | | | |
| 393 | 5.83 | 34.16 | 0.80 | 113 | | | | | | | |
| 496 | 5.36 | 34.23 | 0.74 | 102 | | | | | | | |

60.55 SPENCER F. BAIRD; June 13, 1952; 1108 GCT; 37°49'N, 123°20'W; sounding, 74 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.88 | 31.38 | 8.71 | 426 | 0 | 12.88 | 31.38 | 8.71 | 23.64 | 426 | 0.00 |
| 10 | 11.06 | 33.19 | 7.06 | 261 | 10 | 11.06 | 33.19 | 7.06 | 25.38 | 261 | 0.03 |
| 20 | 10.06 | 33.46 | 5.07 | 224 | 20 | 10.06 | 33.46 | 5.07 | 25.76 | 224 | 0.06 |
| 30 | 9.40 | 33.57 | 2.87 | 206 | 30 | 9.40 | 33.57 | 2.87 | 25.96 | 206 | 0.08 |
| 49 | 8.76 | 33.71 | 2.81 | 186 | 50 | 8.74 | 33.71 | 2.81 | 26.17 | 185 | 0.12 |
| 64 | 8.67 | 33.84 | 2.55 | 175 | 75 | (8.55) | (33.87) | (0.57) | (26.32) | (171) | (0.16) |
| 73 | 8.58 | 33.87 | 0.62 | 171 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| SPENCER F. BAIRD; June 13, 1952; 0719 GCT; 37°33.5'N, 123°33'W; sounding, 1875 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 18°. | | | | | | | | | | | 60.60 |
| 0 | 12.45 | 33.26 | 6.69 | 280 | 0 | 12.45 | 33.26 | 6.69 | 25.17 | 280 | 0.00 |
| 9 | 12.40 | 33.26 | 6.63 | 279 | 10 | 12.40 | 33.26 | 6.62 | 25.18 | 279 | 0.03 |
| 24 | 11.75 | 33.28 | 6.16 | 266 | 20 | 12.20 | 33.27 | 6.35 | 25.23 | 275 | 0.06 |
| 48 | 9.48 | 33.58 | 3.92 | 206 | 30 | 11.10 | 33.34 | 5.80 | 25.49 | 250 | 0.08 |
| 71 | 8.88 | 33.75 | 2.67 | 185 | 50 | 9.39 | 33.60 | 3.80 | 25.98 | 203 | 0.13 |
| 94 | 8.58 | 33.86 | 2.52 | 172 | 75 | 8.82 | 33.77 | 2.64 | 26.20 | 182 | 0.18 |
| 141 | 7.98 | 33.95 | 2.30 | 157 | 100 | 8.51 | 33.87 | 2.48 | 26.33 | 170 | 0.22 |
| 186 | 7.58 | 34.04 | 2.23 | 144 | 150 | 7.90 | 33.97 | 2.29 | 26.50 | 154 | 0.30 |
| 230 | 7.30 | 34.11 | 1.83 | 135 | 200 | 7.48 | 34.07 | 2.12 | 26.64 | 141 | 0.38 |
| 274 | 7.01 | 34.13 | 1.42 | 130 | 250 | 7.17 | 34.12 | 1.65 | 26.72 | 133 | 0.45 |
| 368 | 6.35 | 34.20 | 0.90 | 116 | 300 | 6.84 | 34.15 | 1.23 | 26.79 | 126 | 0.51 |
| 456 | 5.64 | 34.23 | 0.59 | 106 | 400 | 6.09 | 34.21 | 0.75 | 26.94 | 112 | 0.64 |
| 552 | 5.20 | 34.31 | 0.34 | 95 | 500 | 5.42 | 34.26 | 0.45 | 27.06 | 101 | 0.75 |
| 740 | 4.65 | - | 0.42 | | 600 | 5.03 | | 0.34 | | | |
| 929 | 4.02 | - | 0.68 | | 700 | 4.76 | | 0.39 | | | |
| 1130 | 3.50 | 34.47 | 0.78 | 65 | 800 | 4.49 | | 0.50 | | | |
| | | | | | 1000 | 3.81 | | 0.72 | | | |
| SPENCER F. BAIRD; June 13, 1952; 0230 GCT; 37°19'N, 124°22'W; sounding, 2240 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 17°. | | | | | | | | | | | 60.70 |
| 0 | 13.51 | 32.97 | 6.29 | 321 | 0 | 13.51 | 32.97 | 6.29 | 24.74 | 321 | 0.00 |
| 10 | 12.19 | 33.13 | 6.48 | 285 | 10 | 12.19 | 33.13 | 6.48 | 25.12 | 285 | 0.03 |
| 19 | 11.17 | 33.22 | 6.43 | 260 | 20 | 11.18 | 33.22 | 6.41 | 25.38 | 261 | 0.06 |
| 34 | - | 33.15 | 5.84 | | 30 | 10.52 | 33.15 | 5.90 | 25.44 | 255 | 0.08 |
| 48 | 9.76 | 33.24 | 5.58 | 236 | 50 | 9.69 | 33.26 | 5.50 | 25.67 | 233 | 0.13 |
| 63 | 9.33 | 33.40 | 4.89 | 217 | 75 | 8.92 | 33.50 | 4.67 | 25.98 | 204 | 0.19 |
| 77 | 8.90 | 33.51 | 4.65 | 203 | 100 | 8.66 | 33.62 | 4.00 | 26.11 | 191 | 0.24 |
| 96 | 8.72 | 33.60 | 4.16 | 193 | 150 | 7.56 | 33.87 | 3.88 | 26.47 | 157 | 0.32 |
| 120 | 8.18 | 33.75 | 3.42 | 174 | 200 | 7.13 | 33.95 | 3.01 | 26.60 | 145 | 0.40 |
| 147 | 7.59 | 33.86 | 3.86 | 158 | 250 | 6.66 | 33.96 | 2.48 | 26.67 | 138 | 0.47 |
| 193 | 7.17 | 33.95 | 3.15 | 146 | 300 | 6.23 | 33.99 | 2.00 | 26.75 | 131 | 0.54 |
| 239 | 6.77 | 33.95 | 2.55 | 140 | 400 | 5.68 | 34.02 | 1.02 | 26.84 | 122 | 0.67 |
| 285 | 6.32 | 33.98 | 2.17 | 132 | 500 | 5.21 | 34.20 | 0.67 | 27.04 | 103 | 0.79 |
| 383 | 5.76 | 34.00 | 1.13 | 124 | 600 | (4.78) | (34.22) | | (27.10) | (97) | (0.90) |
| 479 | 5.30 | 34.18 | 0.71 | 105 | | | | | | | |
| 582 | 4.85 | 34.22 | 0.56 | 98 | | | | | | | |
| SPENCER F. BAIRD; June 12, 1952; 2213 GCT; 37°00.5'N, 125°03.5'W; sounding, 2285 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 16°. | | | | | | | | | | | 60.80 |
| 0 | 13.89 | 32.77 | 6.14 | 343 | 0 | 13.89 | 32.77 | 6.14 | 24.51 | 343 | 0.00 |
| 10 | 12.58 | 32.77 | 6.26 | 319 | 10 | 12.58 | 32.77 | 6.26 | 24.77 | 319 | 0.03 |
| 24 | 11.50 | 32.77 | 6.31 | 299 | 20 | 11.71 | 32.77 | 6.31 | 24.93 | 303 | 0.06 |
| 48 | 10.79 | 32.75 | 6.09 | 289 | 30 | 11.31 | 32.77 | 6.30 | 25.01 | 296 | 0.09 |
| 72 | 10.06 | 32.99 | 5.91 | 259 | 50 | 10.72 | 32.75 | 6.08 | 25.10 | 288 | 0.15 |
| 96 | 9.41 | 33.10 | 5.48 | 241 | 75 | 10.00 | 33.00 | 5.88 | 25.41 | 257 | 0.22 |
| 147 | 8.10 | 33.62 | 4.37 | 183 | 100 | 9.30 | 33.15 | 5.35 | 25.64 | 235 | 0.28 |
| 192 | 7.70 | 33.80 | 3.69 | 164 | 150 | 8.06 | 33.64 | 4.32 | 26.22 | 181 | 0.39 |
| 238 | 7.12 | 33.91 | 2.99 | 148 | 200 | 7.62 | 33.82 | 3.56 | 26.42 | 161 | 0.48 |
| 284 | 6.50 | 33.91 | 2.64 | 140 | 250 | 6.97 | 33.91 | 2.88 | 26.59 | 146 | 0.55 |
| 380 | 5.65 | 34.02 | 1.40 | 121 | 300 | 6.31 | 33.92 | 2.42 | 26.68 | 137 | 0.63 |
| 472 | 5.22 | 34.13 | 0.76 | 108 | 400 | 5.56 | 34.04 | 1.21 | 26.87 | 119 | 0.76 |
| 570 | 4.76 | 34.21 | 0.52 | 97 | 500 | 5.09 | 34.15 | 0.68 | 27.01 | 105 | 0.88 |
| 762 | 4.19 | 34.33 | 0.36 | 82 | 600 | 4.66 | 34.23 | 0.46 | 27.13 | 95 | 0.98 |
| 952 | 3.62 | 34.45 | 0.51 | 68 | 700 | 4.35 | 34.29 | 0.36 | 27.21 | 87 | 1.08 |
| 1153 | 3.20 | 34.47 | 0.75 | 63 | 800 | 4.10 | 34.35 | 0.38 | 27.28 | 80 | 1.17 |
| | | | | | 1000 | 3.51 | 34.46 | 0.58 | 27.43 | 66 | 1.33 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

60.90 SPENCER F. BAIRD; June 12, 1952; 1719, 1734 GCT; 36°38.5'N, 125°50'W; sounding, 2410 fm; wind, 320°, force 1; weather, cloudy; sea, moderate; wire angle, 14°, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.64 | 32.79 | 6.19 | 337 | 0 | 13.64 | 32.79 | 6.19 | 24.58 | 337 | 0.00 |
| 10 | 13.56 | 32.80 | 6.02 | 335 | 10 | 13.56 | 32.80 | 6.02 | 24.60 | 335 | 0.03 |
| 20 | 13.56 | 32.79 | 6.11 | 336 | 20 | 13.56 | 32.79 | 6.11 | 24.59 | 336 | 0.07 |
| 34 | - | 32.81 | 6.05 | | 30 | 13.51 | 32.80 | 6.06 | 24.61 | 334 | 0.10 |
| 53 | 11.61 | 32.88 | 6.37 | 293 | 50 | 12.46 | 32.88 | 6.36 | 24.88 | 308 | 0.17 |
| 68 | 11.19 | 32.88 | 6.26 | 286 | 75 | 10.85 | 32.88 | 6.15 | 25.17 | 280 | 0.24 |
| | | | | | 100 | 9.43 | 33.14 | 5.08 | 25.62 | 238 | 0.30 |
| 82 | 10.46 | 32.88 | 5.99 | 274 | 150 | 8.98 | 33.73 | 3.25 | 26.15 | 187 | 0.41 |
| 105 | 9.40 | 33.24 | 4.84 | 230 | 200 | 8.40 | 33.94 | 2.52 | 26.40 | 163 | 0.50 |
| 136 | 9.10 | 33.60 | 3.74 | 199 | 250 | 7.60 | 34.01 | 2.49 | 26.58 | 147 | 0.58 |
| 154 | 8.92 | 33.77 | 3.11 | 184 | 300 | 7.00 | 34.07 | 2.09 | 26.71 | 134 | 0.65 |
| 203 | 8.37 | 33.95 | 2.49 | 162 | 400 | 6.11 | 34.07 | 1.30 | 26.83 | 123 | 0.79 |
| 257 | 7.50 | 34.02 | 2.49 | 145 | 500 | 5.46 | 34.17 | 0.73 | 26.99 | 108 | 0.91 |
| 301 | 6.98 | 34.07 | 2.09 | 134 | 600 | 4.88 | 34.20 | 0.51 | 27.08 | 99 | 1.02 |
| 408 | 6.06 | 34.07 | 1.24 | 123 | | | | | | | |
| 514 | 5.37 | 34.18 | 0.68 | 106 | | | | | | | |
| 620 | 4.74 | 34.20 | 0.50 | 98 | | | | | | | |

60.100 SPENCER F. BAIRD; June 12, 1952; 1300 GCT; 36°15.5'N, 126°25'W; sounding, 2000 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.49 | 32.79 | 6.29 | 334 | 0 | 13.49 | 32.79 | 6.29 | 24.61 | 334 | 0.00 |
| 9 | 13.47 | - | 6.26 | | 10 | 13.47 | 32.79 | 6.26 | 24.61 | 334 | 0.03 |
| 24 | 13.49 | 32.79 | 6.40 | 334 | 20 | 13.48 | 32.79 | 6.37 | 24.61 | 334 | 0.07 |
| 52 | 12.95 | 32.83 | 6.38 | 321 | 30 | 13.47 | 32.79 | 6.40 | 24.61 | 334 | 0.10 |
| 75 | 12.44 | 32.83 | 6.38 | 312 | 50 | 13.07 | 32.83 | 6.38 | 24.72 | 323 | 0.17 |
| 102 | 10.47 | 32.94 | 5.52 | 269 | 75 | 12.44 | 32.83 | 6.38 | 24.84 | 312 | 0.25 |
| 151 | 8.92 | 33.03 | 3.77 | 239 | 100 | 10.69 | 32.93 | 5.64 | 25.24 | 274 | 0.32 |
| 200 | 8.41 | 33.60 | 2.59 | 189 | 150 | 8.94 | 33.03 | 3.79 | 25.61 | 239 | 0.45 |
| 253 | 7.80 | 33.89 | 2.08 | 159 | 200 | 8.41 | 33.60 | 2.59 | 26.14 | 189 | 0.56 |
| 298 | 7.44 | 34.05 | 1.73 | 142 | 250 | 7.84 | 33.88 | 2.10 | 26.44 | 160 | 0.65 |
| 401 | 6.64 | 34.13 | 1.07 | 125 | 300 | 7.42 | 34.05 | 1.72 | 26.63 | 141 | 0.72 |
| 499 | 5.97 | 34.23 | 0.73 | 110 | 400 | 6.65 | 34.13 | 1.08 | 26.80 | 125 | 0.86 |
| 600 | 5.40 | 34.27 | 0.67 | 100 | 500 | 5.96 | 34.23 | 0.73 | 26.97 | 109 | 0.99 |
| 796 | 4.63 | 34.38 | 0.53 | 83 | 600 | 5.40 | 34.27 | 0.67 | 27.07 | 100 | 1.10 |
| 996 | 3.94 | 34.49 | 0.59 | 68 | 700 | 4.99 | 34.32 | 0.59 | 27.16 | 92 | 1.20 |
| 1196 | 3.43 | 34.51 | 0.74 | 62 | 800 | 4.62 | 34.38 | 0.53 | 27.25 | 83 | 1.30 |
| | | | | | 1000 | 3.93 | 34.49 | 0.60 | 27.41 | 68 | 1.46 |

63.52 SPENCER F. BAIRD; June 17, 1952; 1422 GCT; 37°19.5'N, 122°36'W; sounding, 40 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.19 | 31.87 | 6.90 | 378 | 0 | 12.19 | 31.87 | 6.90 | 24.15 | 378 | 0.00 |
| 10 | 11.81 | 32.21 | 6.57 | 346 | 10 | 11.81 | 32.21 | 6.57 | 24.48 | 346 | 0.04 |
| 20 | 10.12 | 33.30 | 4.87 | 237 | 20 | 10.12 | 33.30 | 4.87 | 25.63 | 237 | 0.07 |
| 29 | 9.32 | 33.62 | 4.02 | 201 | 30 | 9.21 | 33.63 | 4.00 | 26.03 | 198 | 0.09 |
| 39 | 8.79 | 33.73 | 2.76 | 185 | | | | | | | |
| 49 | 8.58 | 33.80 | 2.17 | 176 | | | | | | | |

63.55 SPENCER F. BAIRD; June 17, 1952; 1211 GCT; 37°14'N, 122°49.5'W; sounding, 126 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.86 | 30.48 | 7.31 | 492 | 0 | 12.86 | 30.48 | 7.31 | 22.95 | 492 | 0.00 |
| 9 | 11.90 | 32.39 | 6.87 | 334 | 10 | 11.51 | 32.39 | 6.81 | 24.68 | 328 | 0.04 |
| 24 | 9.38 | 33.33 | 4.53 | 223 | 20 | 9.75 | 33.11 | 6.00 | 25.54 | 245 | 0.07 |
| 48 | 8.79 | 33.62 | 3.44 | 193 | 30 | 9.09 | 33.42 | 4.08 | 25.89 | 212 | 0.09 |
| 71 | 8.88 | 33.84 | 2.88 | 178 | 50 | 8.78 | 33.64 | 3.39 | 26.11 | 191 | 0.13 |
| 95 | 8.46 | 33.91 | 2.27 | 166 | 75 | 8.83 | 33.85 | 2.75 | 26.27 | 176 | 0.18 |
| 120 | 8.33 | 33.96 | 2.05 | 161 | 100 | 8.43 | 33.92 | 2.21 | 26.38 | 165 | 0.22 |
| 138 | 8.16 | 34.02 | 1.98 | 154 | 150 | (8.06) | (34.00) | (1.90) | (26.50) | (154) | (0.30) |
| 149 | 8.09 | 34.00 | 1.90 | 154 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; June 17, 1952; 0458 GCT; 36°50'N, 123°48'W; sounding, 2000 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 33°. 63.65

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.39 | - | 6.42 | | 0 | 13.39 | (33.04) | 6.42 | (24.82) | (314) | (0.00) |
| 8 | 13.38 | 33.04 | 6.29 | 314 | 10 | 13.38 | 33.04 | 6.29 | 24.82 | 314 | 0.03 |
| 20 | 13.38 | 33.03 | 6.29 | 314 | 20 | 13.38 | 33.03 | 6.29 | 24.81 | 314 | 0.06 |
| 34 | 10.48 | 33.57 | 5.40 | 223 | 30 | 12.88 | 33.18 | 5.95 | 25.03 | 294 | 0.09 |
| 51 | 9.40 | 33.75 | 3.59 | 192 | 50 | 9.48 | 33.75 | 3.63 | 26.08 | 194 | 0.14 |
| 64 | 8.98 | 33.75 | 3.17 | 186 | 75 | 8.65 | 33.83 | 2.80 | 26.28 | 175 | 0.19 |
| 81 | 8.58 | 33.86 | 2.58 | 172 | 100 | 8.48 | 33.96 | 2.12 | 26.41 | 163 | 0.23 |
| 99 | 8.48 | 33.96 | 2.12 | 163 | 150 | 7.99 | 34.03 | 1.99 | 26.53 | 151 | 0.31 |
| 121 | 8.24 | 33.96 | 2.44 | 160 | 200 | 7.64 | 34.09 | 1.80 | 26.63 | 141 | 0.39 |
| 143 | 8.04 | 34.02 | 2.01 | 152 | 250 | 7.34 | 34.16 | 1.24 | 26.73 | 132 | 0.46 |
| 189 | 7.70 | 34.07 | 1.92 | 144 | 300 | 6.89 | 34.18 | 1.15 | 26.81 | 125 | 0.52 |
| 234 | 7.43 | 34.14 | 1.36 | 135 | 400 | 5.85 | 34.15 | 1.08 | 26.92 | 114 | 0.65 |
| 280 | 7.08 | 34.18 | 1.14 | 127 | 500 | (5.19) | (34.23) | | (27.06) | (101) | (0.76) |
| 373 | 6.09 | 34.13 | 1.19 | 118 | | | | | | | |
| 475 | 5.32 | 34.22 | 0.61 | 103 | | | | | | | |

SPENCER F. BAIRD; June 17, 1952; 1844, 1859 GCT; 36°49'N, 122°05'W; sounding, 45 fm; wind, 220°, force 1; weather, overcast; sea, slight; wire angle, 11°, 11°. 67.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.16 | 33.53 | 6.07 | 237 | 0 | 11.16 | 33.53 | 6.07 | 25.62 | 237 | 0.00 |
| 10 | 10.36 | 33.55 | 5.25 | 222 | 10 | 10.36 | 33.55 | 5.25 | 25.78 | 222 | 0.02 |
| | | | | | 20 | 9.60 | 33.55 | 4.34 | 25.91 | 210 | 0.04 |
| 20 | 9.60 | 33.55 | 4.34 | 210 | 30 | 9.22 | 33.58 | 3.80 | 25.99 | 202 | 0.07 |
| 29 | 9.26 | 33.58 | 3.82 | 203 | 50 | 8.98 | 33.69 | 3.25 | 26.12 | 190 | 0.10 |
| 49 | 9.00 | 33.69 | 3.27 | 191 | 75 | (8.53) | (33.96) | (2.34) | (26.40) | (164) | (0.15) |
| 64 | 8.74 | 33.84 | 2.68 | 176 | | | | | | | |
| 73 | 8.57 | 33.93 | 2.39 | 167 | | | | | | | |

SPENCER F. BAIRD; June 17, 1952; 2133 GCT; 36°39'N, 122°26'W; sounding, 1132 fm; wind, 270°, force 2; weather, overcast; sea, very rough; wire angle, 17°. 67.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.40 | 33.17 | 6.56 | 286 | 0 | 12.40 | 33.17 | 6.56 | 25.11 | 286 | 0.00 |
| 9 | 12.10 | 33.19 | 6.56 | 279 | 10 | 11.98 | 33.19 | 6.55 | 25.21 | 277 | 0.03 |
| 19 | 10.27 | 33.19 | 5.82 | 248 | 20 | 10.00 | 33.19 | 5.80 | 25.56 | 243 | 0.05 |
| 33 | 9.20 | 33.21 | 5.36 | 229 | 30 | 9.21 | 33.20 | 5.50 | 25.70 | 230 | 0.08 |
| 47 | 9.37 | 33.53 | 4.28 | 208 | 50 | 9.33 | 33.69 | 4.00 | 26.06 | 196 | 0.12 |
| 61 | 8.88 | 33.82 | 2.97 | 179 | 75 | (8.68) | (33.89) | (2.64) | (26.32) | (171) | (0.17) |
| 74 | 8.70 | 33.89 | 2.64 | 171 | | | | | | | |

SPENCER F. BAIRD; June 18, 1952; 0250 GCT; 36°19'N, 123°09'W; sounding, 1771 fm; wind, 270°, force 3; weather, overcast; sea, rough; wire angle, 17°. 67.65

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.78 | 33.03 | 6.36 | 303 | 0 | 12.78 | 33.03 | 6.36 | 24.93 | 303 | 0.00 |
| 9 | 12.62 | 32.99 | 6.41 | 303 | 10 | 12.60 | 32.99 | 6.43 | 24.94 | 303 | 0.03 |
| 19 | 12.47 | 33.03 | 6.51 | 297 | 20 | 12.40 | 33.04 | 6.51 | 25.01 | 295 | 0.06 |
| 33 | 9.92 | 33.10 | 5.95 | 249 | 30 | 9.99 | 33.09 | 6.12 | 25.48 | 251 | 0.09 |
| 48 | 10.20 | 33.50 | 5.18 | 224 | 50 | 10.19 | 33.49 | 5.00 | 25.76 | 224 | 0.14 |
| 62 | 8.85 | 33.48 | 4.33 | 204 | 75 | 8.79 | 33.60 | 4.17 | 26.08 | 194 | 0.19 |
| 76 | 8.78 | 33.60 | 4.16 | 194 | 100 | 8.38 | 33.71 | 3.32 | 26.23 | 180 | 0.24 |
| 96 | 8.44 | 33.69 | 3.40 | 182 | 150 | 7.73 | 33.91 | 2.83 | 26.48 | 156 | 0.32 |
| 120 | 8.11 | 33.87 | 3.11 | 164 | 200 | 7.12 | 34.01 | 2.60 | 26.64 | 140 | 0.40 |
| 148 | 7.75 | 33.91 | 2.86 | 156 | 250 | 6.89 | 34.04 | 1.87 | 26.70 | 135 | 0.47 |
| 196 | 7.18 | 34.00 | 2.63 | 142 | 300 | 6.31 | 34.05 | 1.84 | 26.78 | 127 | 0.53 |
| 244 | 6.91 | 34.04 | 1.87 | 135 | 400 | 5.57 | 34.11 | 1.02 | 26.92 | 114 | 0.66 |
| 291 | 6.43 | 34.05 | 1.87 | 129 | 500 | 5.26 | 34.19 | 0.62 | 27.03 | 104 | 0.77 |
| 393 | 5.6 a) | 34.11 | 1.07 | 114 | 600 | (4.92) | (34.27) | (0.36) | (27.13) | (95) | (0.88) |
| 490 | 5.28 | 34.18 | 0.64 | 105 | | | | | | | |
| 594 | 4.94 | 34.26 | 0.36 | 96 | | | | | | | |

a) Temperature inferred from pressure thermometer and wire depth.

SIO

CCOFI
5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **70.55** | SPENCER F. BAIRD; June 11, 1952; 0053 GCT; 36°03'N, 122°02'W; sounding, 800 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 44°. | | | | | | | | | | |
| 0 | 14.35 | 33.01 | 6.05 | 335 | 0 | 14.35 | 33.01 | 6.05 | 24.60 | 335 | 0.00 |
| 8 | 14.34 | 33.01 | 5.95 | 335 | 10 | 14.28 | 33.01 | 5.95 | 24.61 | 333 | 0.03 |
| 18 | 14.01 | 33.01 | 6.05 | 328 | 20 | 14.00 | 33.01 | 6.11 | 24.67 | 328 | 0.07 |
| 40 | - | 32.92 | 7.06 | | 30 | 11.95 | 32.94 | 6.93 | 25.02 | 295 | 0.10 |
| 58 | 9.72 | 33.21 | 4.92 | 237 | 50 | 9.82 | 32.95 | 5.60 | 25.40 | 258 | 0.15 |
| 80 | 9.88 | 33.57 | 4.65 | 213 | 75 | 9.88 | 33.53 | 4.72 | 25.85 | 216 | 0.21 |
| 119 | 8.86 | 33.71 | 2.92 | 187 | 100 | 9.30 | 33.64 | 3.65 | 26.03 | 199 | 0.27 |
| 158 | 8.24 | 33.98 | 2.30 | 158 | 150 | 8.34 | 33.93 | 2.40 | 26.40 | 163 | 0.36 |
| 198 | 7.78 | 34.11 | 1.90 | 142 | 200 | 7.75 | 34.11 | 1.89 | 26.63 | 141 | 0.43 |
| 231 | 7.57 | 34.05 | 1.72 | 143 | 250 | 7.40 | 34.09 | 1.60 | 26.67 | 138 | 0.51 |
| 306 | 6.80 | 34.13 | 1.21 | 127 | 300 | 6.85 | 34.13 | 1.25 | 26.78 | 128 | 0.57 |
| 377 | 6.34 | 34.16 | 0.75 | 119 | 400 | 6.21 | 34.16 | 0.70 | 26.88 | 118 | 0.70 |
| 448 | 5.98 | 34.16 | 0.63 | 115 | 500 | 5.74 | 34.19 | 0.54 | 26.97 | 110 | 0.82 |
| 592 | 5.4 a) | 34.33 | 0.40 | 95 | 600 | 5.34 | 34.34 | 0.39 | 27.13 | 94 | 0.93 |
| 752 | 4.62 | 34.40 | 0.31 | 82 | 700 | 4.83 | 34.39 | 0.33 | 27.23 | 85 | 1.03 |
| 942 | 4.10 | 34.40 | 0.43 | 76 | 800 | 4.47 | 34.40 | 0.31 | 27.28 | 80 | 1.12 |
| | | | | | 1000 | (3.99) | (34.42) | | (27.35) | (74) | (1.29) |
| **70.60** | SPENCER F. BAIRD; June 11, 1952; 0430 GCT; 35°54'N, 122°27'W; sounding, 1700 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 45°. | | | | | | | | | | |
| 0 | 14.15 | 33.01 | 6.24 | 331 | 0 | 14.15 | 33.01 | 6.24 | 24.64 | 331 | 0.00 |
| 8 | 14.12 | 33.04 | 6.11 | 328 | 10 | 13.86 | 33.04 | 6.11 | 24.72 | 323 | 0.03 |
| 18 | 11.65 | 33.01 | 6.40 | 284 | 20 | 11.48 | 33.01 | 6.39 | 25.16 | 281 | 0.06 |
| 28 | - | 33.04 | 6.07 | | 30 | 10.81 | 33.05 | 6.00 | 25.31 | 267 | 0.09 |
| 42 | 10.18 | - | 5.62 | | 50 | 9.70 | 33.25 | 5.18 | 25.66 | 234 | 0.14 |
| 52 | 9.58 | 33.28 | 4.99 | 230 | 75 | 9.14 | 33.59 | 3.65 | 26.01 | 200 | 0.20 |
| 66 | 9.16 | 33.46 | 4.25 | 210 | 100 | 8.82 | 33.80 | 2.81 | 26.23 | 180 | 0.24 |
| 80 | 9.14 | 33.64 | 3.33 | 197 | 150 | 8.28 | 34.00 | 2.26 | 26.47 | 157 | 0.33 |
| 99 | 8.82 | 33.80 | 2.83 | 180 | 200 | 7.68 | 34.08 | 1.91 | 26.62 | 143 | 0.41 |
| 116 | 8.54 | 33.95 | 2.74 | 165 | 250 | 7.07 | 34.09 | 1.72 | 26.71 | 134 | 0.48 |
| 152 | 8.24 | 34.00 | 2.22 | 157 | 300 | 6.62 | 34.14 | 1.39 | 26.81 | 124 | 0.54 |
| 188 | 7.86 | 34.09 | 1.98 | 145 | 400 | 5.92 | 34.19 | 0.70 | 26.94 | 112 | 0.67 |
| 224 | 7.34 | 34.07 | 1.83 | 139 | 500 | (5.38) | (34.23) | | (27.04) | (103) | (0.78) |
| 292 | 6.7 a) | 34.14 | 1.44 | 125 | | | | | | | |
| 371 | 6.08 | 34.18 | 0.86 | 115 | | | | | | | |
| 463 | 5.57 | 34.22 | 0.49 | 106 | | | | | | | |
| **70.70** | SPENCER F. BAIRD; June 11, 1952; 1053, 1122 GCT; 35°33'N, 123°21'W; sounding, 2078 fm; wind, 330°, force 6; weather, partly cloudy; sea, very rough; wire angle, 40°, 40°. | | | | | | | | | | |
| 0 | 13.18 | 32.81 | 6.11 | 327 | 0 | 13.18 | 32.81 | 6.11 | 24.68 | 327 | 0.00 |
| 8 | 13.16 | 32.81 | 6.13 | 326 | 10 | 13.16 | 32.81 | 6.11 | 24.69 | 326 | 0.03 |
| 23 | 13.16 | 32.81 | 5.91 | 326 | 20 | 13.17 | 32.81 | 5.93 | 24.69 | 327 | 0.07 |
| | | | | | 30 | 13.18 | 32.81 | 5.96 | 24.68 | 327 | 0.10 |
| 46 | 13.18 | 32.79 | 6.50 | 328 | 50 | 13.15 | 32.79 | 6.63 | 24.67 | 328 | 0.16 |
| 71 | 12.47 | 32.94 | 6.70 | 304 | 75 | 12.52 | 32.93 | 6.65 | 24.91 | 306 | 0.24 |
| 88 | 11.54 | 32.86 | 6.09 | 293 | 100 | 10.78 | 32.87 | 5.93 | 25.18 | 280 | 0.32 |
| 123 | 9.64 | 33.01 | 5.67 | 251 | 150 | 8.81 | 33.64 | 3.78 | 26.10 | 192 | 0.44 |
| 142 | 8.90 | 33.55 | 3.93 | 200 | 200 | 8.46 | 33.89 | 2.97 | 26.35 | 168 | 0.53 |
| 195 | 8.52 | 33.87 | 3.03 | 170 | 250 | 7.80 | 34.04 | 2.61 | 26.57 | 147 | 0.61 |
| 235 | 8.00 | 34.02 | 2.76 | 152 | 300 | 7.19 | 34.07 | 2.12 | 26.68 | 137 | 0.68 |
| 320 | 6.96 | 34.09 | 1.93 | 132 | 400 | 6.25 | 34.16 | 1.13 | 26.88 | 118 | 0.81 |
| 400 | 6.25 | 34.16 | 1.13 | 118 | 500 | 5.52 | 34.25 | 0.57 | 27.04 | 103 | 0.93 |
| 478 | 5.64 | 34.23 | 0.66 | 106 | 600 | 5.11 | 34.33 | 0.37 | 27.15 | 92 | 1.03 |
| 657 | 4.9 a) | 34.36 | 0.34 | 88 | 700 | 4.78 | 34.37 | 0.33 | 27.22 | 86 | 1.13 |
| 855 | 4.27 | 34.42 | 0.42 | 76 | 800 | 4.44 | 34.41 | 0.39 | 27.29 | 79 | 1.22 |
| 1053 | 3.55 | 34.49 | 0.64 | 64 | 1000 | 3.76 | 34.47 | 0.57 | 27.41 | 68 | 1.38 |

a) Temperature inferred from pressure thermometer and wire depth.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| SPENCER F. BAIRD; June 11, 1952; 1555 GCT; 35°22'N, 123°50'W; sounding, 2180 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 19°. | | | | | | | | | | | 70.80 |
| 0 | 13.30 | 32.90 | 6.26 | 322 | 0 | 13.30 | 32.90 | 6.26 | 24.73 | 322 | 0.00 |
| 9 | 13.28 | 32.92 | 6.29 | 321 | 10 | 13.28 | 32.92 | 6.30 | 24.75 | 321 | 0.03 |
| 23 | 12.94 | 32.94 | 6.46 | 313 | 20 | 12.98 | 32.94 | 6.41 | 24.82 | 313 | 0.06 |
| 38 | 11.17 | 32.94 | 6.60 | 281 | 30 | 12.05 | 32.94 | 6.56 | 25.00 | 296 | 0.09 |
| 57 | 11.39 | 32.84 | 6.16 | 292 | 50 | 11.39 | 32.89 | 6.27 | 25.09 | 289 | 0.15 |
| 71 | 10.42 | 32.75 | 6.13 | 283 | 75 | 10.23 | 32.75 | 6.10 | 25.18 | 280 | 0.22 |
| 90 | 9.50 | 32.81 | 5.76 | 264 | 100 | 9.28 | 32.95 | 5.47 | 25.49 | 250 | 0.29 |
| 112 | 9.06 | 33.13 | 5.03 | 233 | 150 | 8.76 | 33.64 | 3.57 | 26.11 | 191 | 0.40 |
| 141 | 8.86 | 33.53 | 3.91 | 201 | 200 | 8.20 | 33.92 | 2.89 | 26.42 | 162 | 0.49 |
| 169 | 8.53 | 33.80 | 3.19 | 176 | 250 | 7.59 | 34.00 | 2.41 | 26.57 | 147 | 0.57 |
| 225 | 7.90 | 33.98 | 2.65 | 153 | 300 | 7.00 | 34.03 | 1.99 | 26.68 | 137 | 0.64 |
| 284 | 7.18 | 34.02 | 2.10 | 140 | 400 | 6.14 | 34.12 | 1.21 | 26.86 | 120 | 0.78 |
| 337 | 6.69 | 34.04 | 1.70 | 133 | 500 | 5.64 | 34.24 | 0.60 | 27.02 | 105 | 0.90 |
| 448 | 5.80 | 34.18 | 0.86 | 111 | 600 | 5.21 | 34.35 | 0.37 | 27.16 | 92 | 1.00 |
| 563 | 5.40 | 34.31 | 0.42 | 97 | | | | | | | |
| 678 | 4.73 | 34.40 | 0.31 | 83 | | | | | | | |
| SPENCER F. BAIRD; June 11, 1952; 2030 GCT; 35°00'N, 124°34'W; sounding, 2250 fm; wind, 300°, force 2; weather, cloudy; sea, rough; wire angle, 24°. | | | | | | | | | | | 70.90 |
| 0 | 14.71 | 33.03 | 5.85 | 341 | 0 | 14.71 | 33.03 | 5.85 | 24.54 | 341 | 0.00 |
| 9 | 14.68 | 33.08 | 5.91 | 336 | 10 | 14.69 | 33.08 | 5.91 | 24.58 | 337 | 0.03 |
| 23 | 14.60 | 33.03 | 5.87 | 338 | 20 | 14.62 | 33.04 | 5.88 | 24.56 | 338 | 0.07 |
| 51 | - | 33.04 | 6.01 | | 30 | 14.55 | 33.03 | 5.88 | 24.57 | 337 | 0.10 |
| 73 | 11.72 | 32.94 | 6.16 | 291 | 50 | 14.12 | 33.04 | 6.00 | 24.67 | 328 | 0.17 |
| 100 | 9.46 | 33.10 | 5.12 | 242 | 75 | 11.60 | 32.94 | 6.15 | 25.09 | 288 | 0.25 |
| 149 | 8.80 | 33.69 | 3.27 | 188 | 100 | 9.46 | 33.10 | 5.12 | 25.58 | 242 | 0.31 |
| 196 | 7.93 | 33.91 | 3.13 | 159 | 150 | 8.77 | 33.70 | 3.24 | 26.16 | 187 | 0.42 |
| 249 | 7.34 | 33.98 | 3.03 | 146 | 200 | 7.87 | 33.91 | 3.12 | 26.46 | 158 | 0.51 |
| 294 | 6.93 | 34.03 | 2.35 | 136 | 250 | 7.33 | 33.98 | 3.03 | 26.59 | 145 | 0.59 |
| 395 | 6.20 | 34.13 | 1.27 | 120 | 300 | 6.88 | 34.03 | 2.28 | 26.69 | 136 | 0.66 |
| 492 | 5.60 | 34.20 | 0.68 | 107 | 400 | 6.16 | 34.13 | 1.22 | 26.87 | 119 | 0.79 |
| 589 | 5.18 | 34.31 | 0.38 | 94 | 500 | 5.57 | 34.21 | 0.64 | 27.00 | 106 | 0.91 |
| 781 | 4.5 a) | 34.38 | 0.41 | 82 | 600 | 5.13 | 34.32 | 0.38 | 27.14 | 93 | 1.02 |
| 980 | 3.80 | 34.46 | 0.49 | 69 | 700 | 4.75 | 34.35 | 0.40 | 27.21 | 87 | 1.11 |
| 1180 | 3.31 | 34.51 | 0.80 | 61 | 800 | 4.39 | 34.39 | 0.41 | 27.28 | 80 | 1.20 |
| | | | | | 1000 | 3.74 | 34.47 | 0.51 | 27.41 | 68 | 1.37 |
| SPENCER F. BAIRD; June 12, 1952; 0101 GCT; 34°37'N, 125°05'W; sounding, 2000 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 30°. | | | | | | | | | | | 70.100 |
| 0 | 14.88 | 33.01 | 5.87 | 346 | 0 | 14.88 | 33.01 | 5.87 | 24.49 | 346 | 0.00 |
| 8 | 14.84 | 33.01 | 5.91 | 345 | 10 | 14.81 | 33.01 | 5.91 | 24.50 | 344 | 0.03 |
| 17 | 14.72 | 33.03 | 5.89 | 341 | 20 | 14.69 | 33.03 | 5.89 | 24.54 | 340 | 0.07 |
| 30 | - | 33.03 | 5.91 | | 30 | 14.63 | 33.03 | 5.91 | 24.55 | 339 | 0.10 |
| 47 | 14.56 | 33.03 | 5.91 | 338 | 50 | 14.55 | 33.03 | 5.98 | 24.57 | 337 | 0.17 |
| 60 | 12.95 | 32.95 | 6.26 | 312 | 75 | 12.52 | 32.95 | 6.21 | 24.92 | 304 | 0.25 |
| 74 | 12.58 | 32.95 | 6.21 | 305 | 100 | 10.60 | 32.96 | 5.72 | 25.28 | 270 | 0.32 |
| 94 | 11.12 | 32.95 | 5.90 | 279 | 150 | 8.92 | 33.46 | 4.16 | 25.95 | 207 | 0.44 |
| 123 | 9.26 | 33.24 | 4.74 | 228 | 200 | 8.08 | 33.87 | 3.27 | 26.40 | 164 | 0.54 |
| 139 | 9.08 | 33.35 | 4.40 | 217 | 250 | 7.51 | 33.96 | 2.63 | 26.55 | 149 | 0.62 |
| 180 | 8.27 | 33.75 | 3.47 | 176 | 300 | 6.82 | 34.00 | 2.08 | 26.68 | 137 | 0.69 |
| 228 | 7.82 | 33.95 | 2.99 | 154 | 400 | 5.92 | 34.11 | 1.24 | 26.88 | 118 | 0.82 |
| 268 | 7.24 | 33.96 | 2.40 | 146 | 500 | 5.37 | 34.16 | 0.63 | 26.99 | 108 | 0.94 |
| 362 | 6.23 | 34.09 | 1.54 | 123 | | | | | | | |
| 459 | 5.50 | 34.11 | 0.83 | 113 | | | | | | | |
| 563 | 5.21 | 34.25 | 0.36 | 99 | | | | | | | |

a) Temperature inferred from pressure thermometer and wire depth.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 7350 | SPENCER F. BAIRD; June 10, 1952; 1932 GCT; 35°37'N, 121°16.5'W; sounding, 55 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 0 | 12.41 | 33.44 | 5.52 | 266 | 0 | 12.41 | 33.44 | 5.52 | 25.32 | 266 | 0.00 |
| 10 | 10.93 | 33.57 | 4.60 | 230 | 10 | 10.93 | 33.57 | 4.60 | 25.70 | 230 | 0.02 |
| 20 | 10.06 | 33.64 | 4.07 | 211 | 20 | 10.06 | 33.64 | 4.07 | 25.90 | 211 | 0.05 |
| 30 | 9.65 | 33.62 | 3.63 | 206 | 30 | 9.65 | 33.62 | 3.63 | 25.95 | 206 | 0.07 |
| 51 | 9.16 | 33.77 | 2.98 | 187 | 50 | 9.18 | 33.77 | 2.99 | 26.15 | 188 | 0.11 |
| 7360 | SPENCER F. BAIRD; June 10, 1952; 1410 GCT; 35°18'N, 121°58.5'W; sounding, 1350 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | 14.05 | 32.94 | 6.06 | 334 | 0 | 14.05 | 32.94 | 6.06 | 24.61 | 334 | 0.00 |
| 10 | 13.84 | 33.01 | 6.11 | 325 | 10 | 13.84 | 33.01 | 6.11 | 24.70 | 325 | 0.03 |
| 20 | 12.55 | 33.01 | 6.50 | 300 | 20 | 12.55 | 33.01 | 6.50 | 24.96 | 300 | 0.06 |
| 34 | 11.63 | 32.92 | 5.53 | 290 | 30 | 11.93 | 32.93 | 6.20 | 25.02 | 295 | 0.09 |
| 49 | 10.13 | 33.01 | 4.35 | 259 | 50 | 10.01 | 33.04 | 4.35 | 25.44 | 255 | 0.15 |
| 63 | 9.44 | 33.31 | 4.36 | 226 | 75 | 9.15 | 33.51 | 3.91 | 25.95 | 206 | 0.21 |
| 77 | 9.12 | 33.53 | 3.90 | 204 | 100 | 8.96 | 33.76 | 3.48 | 26.17 | 185 | 0.26 |
| 96 | 8.86 | 33.77 | 3.56 | 183 | 150 | 8.29 | 33.88 | 2.49 | 26.37 | 166 | 0.35 |
| 119 | 8.82 | 33.73 | 3.18 | 185 | 200 | 7.74 | 34.00 | 2.40 | 26.55 | 150 | 0.43 |
| 147 | 8.34 | 33.87 | 2.49 | 168 | 250 | 7.39 | 34.15 | 1.72 | 26.72 | 134 | 0.50 |
| 192 | 7.80 | 33.98 | 2.49 | 152 | 300 | 6.90 | 34.16 | 1.40 | 26.79 | 126 | 0.57 |
| 238 | 7.51 | 34.13 | 1.88 | 137 | 400 | 6.07 | 34.17 | 1.00 | 26.91 | 115 | 0.69 |
| 283 | 7.07 | 34.16 | 1.48 | 129 | 500 | 5.54 | 34.24 | 0.49 | 27.03 | 104 | 0.81 |
| 381 | 6.19 | 34.16 | 1.11 | 117 | | | | | | | |
| 475 | 5.65 | 34.23 | 0.58 | 106 | | | | | | | |
| 578 | 5.12 | 34.27 | 0.40 | 97 | | | | | | | |
| 7750 | SPENCER F. BAIRD; June 10, 1952; 0110 GCT; 35°04.5'N, 120°52'W; sounding, 66 fm; wind, 270°, force 1; weather, partly cloudy; sea, slight; wire angle, 06°. | | | | | | | | | | |
| 0 | 12.53 | 33.57 | 5.97 | 259 | 0 | 12.53 | 33.57 | 5.97 | 25.40 | 259 | 0.00 |
| 10 | 12.20 | 33.57 | 5.86 | 253 | 10 | 12.20 | 33.57 | 5.86 | 25.46 | 253 | 0.03 |
| 20 | 11.57 | 33.62 | 5.80 | 238 | 20 | 11.57 | 33.62 | 5.80 | 25.62 | 238 | 0.05 |
| 30 | 10.72 | 33.71 | 4.76 | 217 | 30 | 10.72 | 33.71 | 4.76 | 25.84 | 217 | 0.07 |
| 50 | 10.41 | 33.75 | 4.16 | 209 | 50 | 10.41 | 33.75 | 4.16 | 25.93 | 209 | 0.12 |
| 65 | 9.78 | 33.87 | 3.03 | 189 | 75 | 9.26 | 33.95 | 2.39 | 26.28 | 175 | 0.16 |
| 75 | 9.26 | 33.95 | 2.39 | 175 | | | | | | | |
| 7755 | SPENCER F. BAIRD; June 10, 1952; 0346 GCT; 34°55'N, 121°12'W; sounding, 300 fm; wind, 270°, force 1; weather, partly cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 13.84 | 33.57 | 6.46 | 284 | 0 | 13.84 | 33.57 | 6.46 | 25.14 | 284 | 0.00 |
| 8 | 13.26 | 33.60 | 6.54 | 270 | 10 | 13.12 | 33.60 | 6.54 | 25.31 | 268 | 0.03 |
| 24 | 12.60 | 33.60 | 6.40 | 258 | 20 | 12.80 | 33.60 | 6.50 | 25.37 | 262 | 0.05 |
| 49 | 10.90 | 33.75 | 4.87 | 217 | 30 | 12.29 | 33.64 | 6.28 | 25.50 | 249 | 0.08 |
| 75 | 9.50 | 33.75 | 3.08 | 194 | 50 | 10.80 | 33.75 | 4.80 | 25.86 | 215 | 0.13 |
| 99 | 8.82 | 33.86 | 2.69 | 175 | 75 | 9.50 | 33.75 | 3.08 | 26.08 | 194 | 0.18 |
| 154 | 8.21 | 34.04 | 2.11 | 153 | 100 | 8.79 | 33.88 | 2.67 | 26.30 | 174 | 0.22 |
| 202 | 7.64 | 34.05 | 1.88 | 144 | 150 | 8.26 | 34.03 | 2.15 | 26.49 | 155 | 0.31 |
| 251 | 7.21 | 34.13 | 1.45 | 133 | 200 | 7.66 | 34.05 | 1.90 | 26.60 | 145 | 0.38 |
| 299 | 7.22 | 34.20 | 0.95 | 128 | 250 | 7.21 | 34.13 | 1.45 | 26.73 | 133 | 0.45 |
| 352 | 6.94 | 34.22 | 0.80 | 122 | 300 | 7.22 | 34.20 | 0.94 | 26.78 | 128 | 0.52 |
| 402 | 6.43 | 34.25 | 0.68 | 114 | 400 | 6.45 | 34.25 | 0.69 | 26.92 | 114 | 0.65 |
| 451 | 6.23 | 34.22 | 0.57 | 113 | 500 | 5.98 | 34.25 | 0.49 | 26.98 | 108 | 0.76 |
| 501 | 5.97 | 34.25 | 0.49 | 108 | | | | | | | |
| 7765 | SPENCER F. BAIRD; June 10, 1952; 0855 GCT; 34°34'N, 121°55'W; sounding, 2077 fm; wind, 270°, force 3; weather, partly cloudy; sea, moderate; wire angle, 19°. | | | | | | | | | | |
| 0 | 14.27 | 32.94 | 6.06 | 338 | 0 | 14.27 | 32.94 | 6.06 | 24.56 | 338 | 0.00 |
| 9 | 14.11 | 32.99 | 6.06 | 332 | 10 | 14.08 | 32.99 | 6.06 | 24.64 | 331 | 0.03 |
| 19 | 13.66 | 32.99 | 6.53 | 323 | 20 | 13.53 | 32.99 | 6.53 | 24.75 | 320 | 0.07 |
| 33 | 12.73 | 33.01 | 6.26 | 304 | 30 | 12.95 | 33.00 | 6.28 | 24.88 | 309 | 0.10 |
| 47 | 11.18 | 33.31 | 6.32 | 254 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| SPENCER F. BAIRD; June 9, 1952; 2048 GCT; 34°26.5'N, 120°33.5'W; sounding, 56 fm; wind, 270°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 80.51 |
| 0 | 13.53 | 33.58 | 6.24 | 277 | 0 | 13.53 | 33.58 | 6.24 | 25.21 | 277 | 0.00 |
| 10 | 11.28 | 33.64 | 4.96 | 231 | 10 | 11.28 | 33.64 | 4.96 | 25.69 | 231 | 0.03 |
| 20 | 10.46 | 33.68 | 4.04 | 215 | 20 | 10.46 | 33.68 | 4.04 | 25.86 | 215 | 0.05 |
| 30 | 9.97 | 33.69 | 3.82 | 206 | 30 | 9.97 | 33.69 | 3.82 | 25.96 | 206 | 0.07 |
| 50 | 9.36 | 33.82 | 2.93 | 187 | 50 | 9.36 | 33.82 | 2.93 | 26.16 | 187 | 0.11 |
| SPENCER F. BAIRD; June 9, 1952; 1855 GCT; 34°17'N, 120°46'W; sounding, 320 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | | 80.55 |
| 15 | 11.71 | 33.69 | 5.33 | 235 | 0 | 14.5 | (33.69) | | (25.09) | (288) | (0.00) |
| 30 | 10.67 | 33.71 | 4.23 | 216 | 10 | 13.0 | (33.69) | | (25.40) | (259) | (0.03) |
| 49 | 9.74 | 33.78 | 3.24 | 195 | 20 | 11.33 | 33.70 | 4.95 | 25.72 | 228 | 0.05 |
| 73 | 9.42 | 33.84 | 2.90 | 186 | 30 | 10.67 | 33.71 | 4.23 | 25.85 | 216 | 0.07 |
| 101 | 9.14 | 33.93 | 2.46 | 175 | 50 | 9.72 | 33.79 | 3.20 | 26.08 | 194 | 0.12 |
| 148 | 8.87 | 34.02 | 2.18 | 164 | 75 | 9.42 | 33.84 | 2.87 | 26.16 | 186 | 0.16 |
| 195 | 8.62 | 34.09 | 1.78 | 155 | 100 | 9.15 | 33.93 | 2.45 | 26.28 | 175 | 0.21 |
| 243 | 8.36 | 34.13 | - | 149 | 150 | 8.86 | 34.02 | 2.15 | 26.39 | 164 | 0.29 |
| 344 | 7.14 | 34.20 | - | 127 | 200 | 8.60 | 34.09 | 1.75 | 26.49 | 155 | 0.38 |
| 441 | 6.44 | 34.23 | - | 115 | 250 | 8.34 | 34.13 | | 26.56 | 148 | 0.45 |
| 545 | - | 34.29 | - | | 300 | 7.83 | 34.17 | | 26.67 | 138 | 0.53 |
| | | | | | 400 | 6.69 | 34.22 | | 26.87 | 119 | 0.66 |
| | | | | | 500 | (6.11) | 34.26 | | (26.98) | (109) | (0.78) |
| SPENCER F. BAIRD; June 9, 1952; 1600 GCT; 34°03'N, 121°08'W; sounding, 780 fm; wind, 180°, force 2; weather, partly cloudy; sea, moderate; wire angle, 08°. | | | | | | | | | | | 80.60 |
| 0 | 14.28 | 33.22 | 6.06 | 318 | 0 | 14.28 | 33.22 | 6.06 | 24.77 | 318 | 0.00 |
| 10 | 13.08 | 33.24 | 6.32 | 293 | 10 | 13.08 | 33.24 | 6.32 | 25.04 | 293 | 0.03 |
| 25 | 12.53 | 33.28 | 6.42 | 280 | 20 | 12.71 | 33.26 | 6.41 | 25.12 | 285 | 0.06 |
| 50 | 11.42 | 33.37 | 5.65 | 254 | 30 | 12.39 | 33.30 | 6.41 | 25.22 | 276 | 0.09 |
| 75 | 9.86 | 33.48 | 4.44 | 220 | 50 | 11.42 | 33.37 | 5.65 | 25.45 | 254 | 0.14 |
| 98 | 9.58 | 33.42 | 3.13 | 220 | 75 | 9.86 | 33.48 | 4.44 | 25.81 | 220 | 0.20 |
| 151 | 8.59 | 33.78 | 2.38 | 178 | 100 | 9.50 | 33.42 | 3.05 | 25.82 | 218 | 0.26 |
| 199 | 8.22 | 33.96 | 1.96 | 159 | 150 | 8.59 | 33.77 | 2.38 | 26.24 | 179 | 0.36 |
| 247 | 7.61 | 34.09 | 1.84 | 141 | 200 | 8.21 | 33.97 | 1.94 | 26.46 | 158 | 0.44 |
| 294 | 7.16 | 34.14 | 1.44 | 131 | 250 | 7.58 | 34.10 | 1.82 | 26.65 | 140 | 0.52 |
| 348 | 6.75 | 34.16 | 0.96 | 124 | 300 | 7.11 | 34.14 | 1.40 | 26.75 | 131 | 0.59 |
| 396 | 6.26 | 34.16 | 0.99 | 118 | 400 | 6.23 | 34.16 | 0.97 | 26.88 | 118 | 0.72 |
| 445 | 6.07 | 34.20 | 0.69 | 113 | 500 | (5.84) | 34.28 | 0.50 | (27.03) | (104) | (0.83) |
| 494 | 5.86 | 34.27 | 0.50 | 105 | | | | | | | |
| 598 | - | 34.31 | 0.47 | | | | | | | | |
| SPENCER F. BAIRD; June 9, 1952; 1052 GCT; 33°49'N, 121°51'W; sounding, 2080 fm; wind, 180°, force 3; weather, cloudy; sea, moderate; wire angle, 08°. | | | | | | | | | | | 80.70 |
| 0 | 13.78 | 33.46 | 6.21 | 291 | 0 | 13.78 | 33.46 | 6.21 | 25.06 | 291 | 0.00 |
| 10 | 13.05 | 33.39 | 6.30 | 282 | 10 | 13.05 | 33.39 | 6.30 | 25.16 | 282 | 0.03 |
| 20 | 12.08 | 33.42 | 6.18 | 262 | 20 | 12.08 | 33.42 | 6.18 | 25.37 | 262 | 0.06 |
| 35 | 11.20 | 33.55 | 4.70 | 237 | 30 | 11.59 | 33.53 | 5.13 | 25.55 | 245 | 0.08 |
| 50 | 9.57 | 33.62 | 3.72 | 205 | 50 | 9.57 | 33.62 | 3.72 | 25.97 | 205 | 0.13 |
| 65 | 9.40 | 33.71 | 3.14 | 195 | 75 | 9.29 | 33.81 | 2.93 | 26.16 | 186 | 0.18 |
| 79 | 9.26 | 33.82 | 2.86 | 185 | 100 | 9.04 | 33.90 | 2.54 | 26.27 | 176 | 0.22 |
| 99 | 9.06 | 33.89 | 2.54 | 177 | 150 | 8.35 | 34.02 | 2.32 | 26.47 | 157 | 0.31 |
| 123 | 8.82 | 33.98 | 2.24 | 167 | 200 | 7.91 | 34.08 | 1.86 | 26.59 | 146 | 0.38 |
| 151 | 8.34 | 34.02 | 2.31 | 157 | 250 | 7.07 | 34.04 | 1.90 | 26.67 | 138 | 0.46 |
| 198 | 7.95 | 34.08 | 1.88 | 147 | 300 | 6.69 | 34.07 | 1.42 | 26.75 | 130 | 0.52 |
| 245 | 7.10 | 34.04 | 1.92 | 138 | 400 | 5.97 | (34.15) | 0.79 | (26.91) | (116) | (0.65) |
| 293 | 6.72 | 34.07 | 1.49 | 131 | 500 | 5.47 | (34.24) | 0.49 | (27.04) | (103) | (0.77) |
| 392 | 6.00 | 34.14 | 0.82 | 117 | 600 | (5.01) | (34.32) | (0.39) | (27.16) | (92) | (0.87) |
| 490 | 5.51 | - | 0.49 | | | | | | | | |
| 594 | 5.04 | 34.31 | 0.39 | 93 | | | | | | | |

SIO

CCOFI
5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

80.80 SPENCER F. BAIRD; June 9, 1952; 0501, 0550 GCT; 33°29'N, 122°32'W; sounding, 2480 fm; wind, 140°, force 1; weather, cloudy; sea, rough; wire angle, 22°, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.85 | 33.12 | 5.69 | 337 | 0 | 14.85 | 33.12 | 5.69 | 24.58 | 337 | 0.00 |
| 9 | 14.84 | 33.09 | 5.81 | 339 | 10 | 14.82 | 33.09 | 5.81 | 24.56 | 339 | 0.03 |
| 22 | 14.50 | 33.12 | 5.81 | 330 | 20 | 14.50 | 33.12 | 5.81 | 24.65 | 330 | 0.07 |
| 46 | 14.23 | 33.10 | 5.84 | 326 | 30 | 14.39 | 33.12 | 5.82 | 24.67 | 328 | 0.10 |
| 69 | 12.71 | 33.12 | 5.81 | 295 | 50 | 14.16 | 33.10 | 5.84 | 24.71 | 325 | 0.17 |
| 92 | 10.52 | 33.22 | 4.84 | 250 | 75 | 11.50 | 33.15 | 5.65 | 25.27 | 271 | 0.24 |
| 139 | 9.54 | 33.80 | 2.86 | 191 | 100 | 10.29 | 33.29 | 4.52 | 25.59 | 241 | 0.30 |
| 184 | 9.08 | 33.96 | 2.49 | 172 | 150 | 9.40 | 33.85 | 2.72 | 26.17 | 185 | 0.41 |
| 228 | 8.70 | 34.07 | 2.04 | 158 | 200 | 8.93 | 34.01 | 2.32 | 26.38 | 166 | 0.50 |
| 273 | 8.24 | 34.14 | 1.68 | 146 | 250 | 8.48 | 34.11 | 1.85 | 26.52 | 152 | 0.58 |
| 366 | 7.48 | 34.20 | 1.19 | 131 | 300 | 8.03 | 34.17 | 1.52 | 26.64 | 141 | 0.66 |
| 457 | 6.49 | 34.23 | 0.71 | 116 | 400 | 7.11 | 34.21 | 1.00 | 26.80 | 125 | 0.80 |
| 552 | 5.80 | 34.27 | 0.45 | 105 | 500 | 6.10 | 34.24 | 0.55 | 26.96 | 110 | 0.92 |
| 745 | 4.8 a) | 34.40 | 0.55 | 84 | 600 | 5.53 | 34.30 | 0.45 | 27.08 | 99 | 1.03 |
| | | | | | 700 | 5.00 | 34.37 | 0.54 | 27.20 | 88 | 1.13 |
| 936 | 4.22 | 34.45 | 0.56 | 74 | 800 | 4.66 | 34.42 | 0.55 | 27.28 | 81 | 1.23 |
| 1135 | 3.58 | 34.52 | 0.72 | 62 | 1000 | 4.02 | 34.47 | 0.60 | 27.38 | 70 | 1.40 |

80.90 SPENCER F. BAIRD; June 9, 1952; 0028 GCT; 33°09'N, 123°13'W; sounding, 2000 fm; wind, 160°, force 1; weather, cloudy; sea, rough; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.46 | 33.21 | 5.93 | 343 | 0 | 15.46 | 33.21 | 5.93 | 24.51 | 343 | 0.00 |
| 9 | 14.72 | 33.13 | 5.95 | 334 | 10 | 14.71 | 33.13 | 5.95 | 24.61 | 333 | 0.03 |
| 18 | 14.60 | - | 5.87 | | 20 | 14.58 | 33.13 | 5.85 | 24.64 | 331 | 0.07 |
| 32 | - | - | 5.84 | | 30 | 14.53 | 33.14 | 5.84 | 24.66 | 329 | 0.10 |
| 46 | 14.48 | 33.17 | 5.92 | 326 | 50 | 14.40 | 33.16 | 5.96 | 24.70 | 325 | 0.17 |
| 60 | 13.40 | 33.12 | 5.98 | 308 | 75 | 12.59 | 33.21 | 5.94 | 25.11 | 286 | 0.24 |
| 73 | 12.63 | 33.21 | 5.95 | 287 | 100 | 10.20 | 33.15 | 4.83 | 25.50 | 249 | 0.31 |
| 91 | 11.03 | 33.13 | 5.36 | 265 | 150 | 8.75 | 33.79 | 3.20 | 26.23 | 180 | 0.42 |
| 113 | 9.61 | 33.40 | 4.04 | 222 | 200 | 8.08 | 34.00 | 2.99 | 26.50 | 154 | 0.50 |
| 140 | 8.92 | 33.73 | 3.30 | 187 | 250 | 7.57 | 34.06 | 2.42 | 26.62 | 143 | 0.58 |
| 184 | 8.26 | 33.95 | 3.02 | 161 | 300 | 7.16 | 34.09 | 1.59 | 26.70 | 135 | 0.65 |
| 228 | 7.77 | 34.02 | 2.90 | 148 | 400 | 6.34 | 34.19 | 0.90 | 26.89 | 117 | 0.78 |
| 274 | 7.36 | 34.07 | 1.91 | 139 | 500 | 5.75 | 34.23 | 0.60 | 27.00 | 107 | 0.90 |
| 370 | 6.57 | 34.16 | 1.06 | 122 | | | | | | | |
| 462 | 5.97 | 34.22 | 0.69 | 110 | | | | | | | |
| 567 | 5.33 | 34.25 | 0.48 | 101 | | | | | | | |

80.100 SPENCER F. BAIRD; June 8, 1952; 2001 GCT; 32°49.5'N, 123°54'W; sounding, 2240 fm; wind, 280°, force 2; weather, cloudy; sea, rough; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.44 | 33.17 | 5.86 | 346 | 0 | 15.44 | 33.17 | 5.86 | 24.49 | 346 | 0.00 |
| 9 | 15.18 | 33.12 | 5.72 | 344 | 10 | 15.16 | 33.11 | 5.72 | 24.50 | 344 | 0.03 |
| 23 | 15.09 | 33.10 | 5.81 | 343 | 20 | 15.09 | 33.10 | 5.81 | 24.51 | 343 | 0.07 |
| 46 | 14.02 | 33.01 | 5.66 | 328 | 30 | 15.08 | 33.08 | 5.79 | 24.50 | 345 | 0.10 |
| 69 | 12.32 | 32.94 | 6.19 | 301 | 50 | 13.60 | 32.99 | 5.67 | 24.74 | 322 | 0.17 |
| 91 | 11.35 | 33.03 | 5.61 | 278 | 75 | 12.07 | 32.95 | 6.10 | 25.01 | 296 | 0.25 |
| 135 | 8.91 | 33.35 | 4.65 | 215 | 100 | 10.63 | 33.10 | 5.41 | 25.38 | 260 | 0.32 |
| 181 | 8.31 | 33.69 | 3.65 | 181 | 150 | 8.69 | 33.46 | 4.30 | 25.98 | 203 | 0.43 |
| 222 | 7.90 | 33.87 | 3.23 | 161 | 200 | 8.13 | 33.78 | 3.45 | 26.32 | 171 | 0.53 |
| 264 | 7.74 | 34.07 | 2.65 | 144 | 250 | 7.79 | 34.01 | 2.85 | 26.55 | 149 | 0.61 |
| 352 | 6.84 | 34.20 | 1.21 | 123 | 300 | 7.43 | 34.15 | 2.08 | 26.71 | 134 | 0.69 |
| 436 | 6.00 | 34.23 | 0.77 | 110 | 400 | 6.31 | 34.22 | 0.90 | 26.92 | 114 | 0.81 |
| 524 | 5.43 | 34.25 | 0.47 | 102 | 500 | 5.58 | 34.24 | 0.50 | 27.03 | 104 | 0.93 |
| 695 | 4.62 | 34.36 | 0.44 | 85 | 600 | 5.03 | 34.30 | 0.45 | 27.14 | 94 | 1.04 |
| 867 | 4.10 | 34.45 | 0.59 | 73 | 700 | 4.61 | 34.36 | 0.44 | 27.23 | 84 | 1.13 |
| 1055 | 3.72 | 34.52 | 0.69 | 64 | 800 | 4.29 | 34.42 | 0.53 | 27.32 | 77 | 1.22 |
| | | | | | 1000 | 3.83 | 34.50 | 0.68 | 27.43 | 66 | 1.38 |

a) Temperature inferred from pressure thermometer and wire depth.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

SPENCER F. BAIRD; June 6, 1952; 1917 GCT; 34°08'N, 119°34'W; sounding, 135 fm; wind, calm; weather, overcast; sea, smooth; wire angle, 03°. 83.43

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.86 | 33.42 | 6.16 | 336 | 0 | 15.86 | 33.42 | 6.16 | 24.59 | 336 | 0.00 |
| 10 | 14.80 | 33.53 | 6.41 | 306 | 10 | 14.80 | 33.53 | 6.41 | 24.90 | 306 | 0.03 |
| 25 | 11.35 | 33.53 | 4.75 | 241 | 20 | 11.90 | 33.53 | 4.90 | 25.49 | 250 | 0.06 |
| 60 | 10.52 | 33.55 | 4.23 | 225 | 30 | 11.20 | 33.53 | 4.63 | 25.62 | 238 | 0.08 |
| 74 | 9.48 | 33.78 | 3.05 | 191 | 50 | 10.79 | 33.54 | 4.40 | 25.70 | 230 | 0.13 |
| 98 | 9.14 | 33.96 | 2.66 | 173 | 75 | 9.47 | 33.80 | 3.05 | 26.12 | 190 | 0.18 |
| 150 | 8.53 | 34.11 | 1.67 | 153 | 100 | 9.10 | 33.97 | 2.62 | 26.32 | 171 | 0.23 |
| 198 | 8.27 | 34.14 | 1.34 | 147 | 150 | 8.53 | 34.11 | 1.67 | 26.52 | 153 | 0.31 |
| | | | | | 200 | (8.25) | (34.15) | (1.33) | (26.59) | (146) | (0.39) |

SPENCER F. BAIRD; June 7, 1952; 1605 GCT; 33°44'N, 120°24.5'W; sounding, 595 fm; wind, 310°, force 2; weather, cloudy; sea, rough; wire angle, 25°. 83.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.25 | 33.46 | 6.03 | 320 | 0 | 15.25 | 33.46 | 6.03 | 24.75 | 320 | 0.00 |
| 9 | 14.74 | 33.42 | 6.26 | 313 | 10 | 14.59 | 33.40 | 6.24 | 24.85 | 311 | 0.03 |
| 19 | 13.41 | 33.31 | 6.16 | 294 | 20 | 13.39 | 33.31 | 6.15 | 25.03 | 294 | 0.06 |
| 33 | 13.30 | 33.51 | 5.76 | 278 | 30 | 13.34 | 33.31 | 5.86 | 25.04 | 293 | 0.09 |
| 49 | 10.93 | 33.39 | 5.05 | 244 | 50 | 10.91 | 33.41 | 5.01 | 25.57 | 242 | 0.14 |
| 64 | 10.70 | 33.55 | 4.57 | 228 | 75 | 10.01 | 33.55 | 4.25 | 25.84 | 217 | 0.20 |
| 74 | 10.08 | 33.55 | 4.25 | 218 | 100 | 9.10 | 33.77 | 2.93 | 26.16 | 186 | 0.25 |
| 94 | 9.22 | 33.71 | 3.14 | 193 | 150 | 8.41 | 33.97 | 2.60 | 26.42 | 161 | 0.34 |
| 120 | 8.82 | 33.88 | 2.58 | 174 | 200 | 7.93 | 34.04 | 2.18 | 26.55 | 149 | 0.42 |
| 136 | 8.60 | 33.95 | 2.60 | 166 | 250 | 7.39 | 34.10 | 1.66 | 26.68 | 137 | 0.49 |
| 179 | 8.15 | 34.01 | 2.42 | 155 | 300 | 6.86 | 34.13 | 1.32 | 26.77 | 128 | 0.56 |
| 225 | 7.69 | 34.07 | 1.88 | 144 | 400 | 6.20 | 34.20 | 0.85 | 26.92 | 115 | 0.69 |
| 264 | 7.21 | 34.11 | 1.56 | 134 | 500 | (5.77) | 34.24 | 0.50 | (27.00) | (106) | (0.81) |
| 355 | 6.45 | 34.17 | 1.06 | 120 | | | | | | | |
| 445 | 6.00 | 34.23 | 0.64 | 110 | | | | | | | |
| 545 | - | 34.24 | 0.43 | | | | | | | | |

SPENCER F. BAIRD; June 7, 1952; 1932 GCT; 33°31'N, 120°43'W; sounding, 1000 fm; wind, 270°, force 1; weather, partly cloudy; sea, rough; wire angle, 17°. 83.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.93 | 33.13 | 5.98 | 318 | 0 | 13.93 | 33.13 | 5.98 | 24.78 | 318 | 0.00 |
| 9 | 13.50 | 33.17 | 6.26 | 306 | 10 | 13.20 | 33.17 | 6.25 | 24.96 | 301 | 0.03 |
| 19 | 12.32 | 33.10 | 6.00 | 290 | 20 | 12.30 | 33.10 | 6.00 | 25.08 | 289 | 0.06 |
| 33 | 12.02 | 33.17 | 5.90 | 279 | 30 | 12.13 | 33.16 | 5.94 | 25.16 | 282 | 0.09 |
| 53 | 10.78 | 33.28 | 5.33 | 249 | 50 | 10.95 | 33.26 | 5.49 | 25.45 | 254 | 0.14 |
| 67 | 10.21 | 33.39 | 4.81 | 232 | 75 | 9.98 | 33.48 | 4.56 | 25.79 | 222 | 0.20 |
| 82 | 9.78 | 33.53 | 4.35 | 215 | 100 | 9.09 | 33.58 | 3.75 | 26.01 | 200 | 0.26 |
| 105 | 8.95 | 33.60 | 3.58 | 197 | 150 | 8.06 | 33.94 | 2.98 | 26.45 | 158 | 0.35 |
| 154 | 8.00 | 33.95 | 2.98 | 157 | | | | | | | |

SPENCER F. BAIRD; June 8, 1952; 0055, 0122 GCT; 33°14.5'N, 121°26'W; sounding, 2000 fm; wind, 200°, force 2; weather, partly cloudy; sea, rough; wire angle, 17°, 19°. 83.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.06 | 33.22 | 6.21 | 314 | 0 | 14.06 | 33.22 | 6.21 | 24.82 | 314 | 0.00 |
| 9 | 13.31 | 33.36 | 6.30 | 289 | 10 | 13.20 | 33.37 | 6.30 | 25.11 | 286 | 0.03 |
| 19 | 12.45 | 33.39 | 6.27 | 271 | 20 | 12.41 | 33.40 | 6.26 | 25.29 | 269 | 0.06 |
| 33 | 11.97 | 33.42 | 5.74 | 260 | 30 | 12.11 | 33.42 | 5.88 | 25.36 | 262 | 0.08 |
| 47 | 10.88 | 33.49 | 5.26 | 236 | 50 | 10.77 | 33.51 | 5.11 | 25.68 | 232 | 0.13 |
| 61 | 10.46 | 33.53 | 4.67 | 226 | 75 | 9.93 | 33.51 | 4.35 | 25.82 | 218 | 0.19 |
| | | | | | 100 | 9.12 | 33.64 | 3.31 | 26.06 | 196 | 0.24 |
| 75 | 9.93 | 33.51 | 4.35 | 218 | 150 | 8.31 | 33.95 | 2.43 | 26.42 | 161 | 0.33 |
| 92 | 9.23 | 33.60 | 3.42 | 201 | 200 | 7.50 | 34.04 | 2.11 | 26.61 | 143 | 0.41 |
| 115 | 8.98 | 33.73 | 3.11 | 187 | 250 | 7.03 | 34.05 | 1.77 | 26.69 | 136 | 0.48 |
| 141 | 8.46 | 33.91 | 2.49 | 166 | 300 | 6.66 | 34.09 | 1.41 | 26.77 | 129 | 0.55 |
| 187 | 7.75 | 34.04 | 2.28 | 147 | 400 | 5.89 | 34.18 | 0.70 | 26.94 | 112 | 0.68 |
| 213 | 7.20 | 34.04 | 1.99 | 139 | 500 | 5.40 | 34.24 | 0.50 | 27.05 | 102 | 0.79 |
| 279 | 6.88 | 34.07 | 1.60 | 133 | | | | | | | |
| 357 | 6.11 | 34.16 | 0.87 | 116 | | | | | | | |
| 471 | 5.52 | 34.22 | 0.56 | 105 | | | | | | | |
| 577 | 5.07 | 34.29 | 0.42 | 95 | | | | | | | |

SIO

CCOFI 5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

83.80 SPENCER F. BAIRD; June 8, 1952; 0734 GCT; 32°54'N, 122°08'W; sounding, 2200 fm; wind, 260°, force 2; weather, cloudy; sea, rough; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.56 | 33.10 | 5.98 | 333 | 0 | 14.56 | 33.10 | 5.98 | 24.62 | 333 | 0.00 |
| 10 | 14.46 | 33.10 | 6.00 | 330 | 10 | 14.46 | 33.10 | 6.00 | 24.64 | 330 | 0.03 |
| 20 | 14.06 | 33.12 | 5.84 | 321 | 20 | 14.06 | 33.12 | 5.84 | 24.74 | 321 | 0.07 |
| 34 | 14.14 | 33.10 | 6.02 | 324 | 30 | 14.14 | 33.11 | 5.98 | 24.72 | 323 | 0.10 |
| 49 | 13.48 | 33.13 | 6.18 | 309 | 50 | 13.41 | 33.13 | 6.18 | 24.88 | 308 | 0.16 |
| 64 | 13.10 | 33.15 | 6.00 | 300 | 75 | 12.45 | 33.19 | 5.88 | 25.12 | 285 | 0.24 |
| 78 | 12.36 | 33.19 | 5.84 | 284 | 100 | 11.38 | 33.22 | 5.37 | 25.34 | 264 | 0.31 |
| 97 | 11.54 | 33.21 | 5.47 | 268 | 150 | 9.44 | 33.55 | 3.56 | 25.93 | 208 | 0.42 |
| 120 | 10.30 | 33.24 | 4.67 | 244 | 200 | 8.59 | 33.96 | 2.70 | 26.39 | 165 | 0.52 |
| 150 | 9.44 | 33.55 | 3.56 | 208 | 250 | 7.91 | 33.98 | 2.49 | 26.51 | 153 | 0.60 |
| 196 | 8.64 | 33.95 | 2.73 | 166 | 300 | 7.29 | 34.01 | 2.02 | 26.62 | 143 | 0.68 |
| 243 | 7.99 | 33.98 | 2.52 | 155 | 400 | 6.31 | 34.15 | 0.98 | 26.86 | 120 | 0.81 |
| 288 | 7.44 | 34.00 | 2.17 | 145 | 500 | 5.77 | 34.20 | 0.77 | 26.97 | 109 | 0.93 |
| 386 | 6.40 | 34.14 | 1.03 | 122 | 600 | (5.18) | (34.30) | | (27.12) | (95) | (1.04) |
| 480 | 5.89 | 34.18 | 0.82 | 112 | | | | | | | |
| 582 | 5.26 | 34.29 | 0.47 | 97 | | | | | | | |

83.90 SPENCER F. BAIRD; June 8, 1952; 1334, 1404 GCT; 32°35.5'N, 122°52'W; sounding, 2200 fm; wind, 220°, force 2; weather, cloudy; sea, rough; wire angle, 11°, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.11 | 33.13 | 6.18 | 342 | 0 | 15.11 | 33.13 | 6.18 | 24.53 | 342 | 0.00 |
| 10 | 15.10 | 33.17 | 5.63 | 338 | 10 | 15.10 | 33.17 | 5.63 | 24.56 | 338 | 0.03 |
| 20 | 15.09 | 33.19 | 5.68 | 337 | 20 | 15.09 | 33.19 | 5.68 | 24.58 | 337 | 0.07 |
| 34 | 14.97 | 33.15 | 5.82 | 337 | 30 | 15.02 | 33.17 | 5.69 | 24.58 | 337 | 0.10 |
| 49 | 13.65 | 33.06 | 6.08 | 317 | 50 | 13.60 | 33.06 | 6.08 | 24.79 | 316 | 0.17 |
| 64 | 13.32 | 33.13 | 6.19 | 306 | 75 | 11.89 | 33.13 | 5.60 | 25.18 | 280 | 0.24 |
| 78 | 11.70 | 33.13 | 5.58 | 276 | 100 | 9.99 | 33.26 | 5.47 | 25.62 | 238 | 0.31 |
| 98 | 10.09 | 33.24 | 5.50 | 241 | 150 | 8.73 | 33.75 | 3.40 | 26.20 | 182 | 0.41 |
| 122 | 9.40 | 33.44 | 4.06 | 215 | 200 | 8.11 | 33.97 | 2.63 | 26.47 | 157 | 0.50 |
| 149 | 8.76 | 33.73 | 3.42 | 184 | 250 | 7.52 | 34.08 | 1.95 | 26.64 | 141 | 0.58 |
| 196 | 8.15 | 33.95 | 2.71 | 159 | 300 | 6.97 | 34.12 | 1.43 | 26.75 | 130 | 0.65 |
| 243 | 7.60 | 34.07 | 2.02 | 142 | 400 | 6.50 | 34.23 | 0.80 | 26.90 | 116 | 0.77 |
| 289 | 7.03 | 34.11 | 1.54 | 132 | 500 | 5.91 | 34.26 | 0.64 | 27.00 | 107 | 0.89 |
| 389 | 6.58 | 34.22 | 0.83 | 118 | 600 | (5.29) | (34.32) | | (27.12) | (95) | (1.00) |
| 485 | 6.00 | 34.25 | 0.67 | 108 | | | | | | | |
| 588 | 5.37 | 34.31 | 0.43 | 97 | | | | | | | |

87.35 YELLOWFIN; June 3, 1952; 1727 GCT; 33°50'N, 118°37.5'W; sounding, 260 fm; wind, 250°, force 2; weather, overcast; sea, missing; wire angle, 26°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.70 | 33.39 | 7.45 | 357 | 0 | 16.70 | 33.39 | 7.45 | 24.37 | 357 | 0.00 |
| 9 | 16.40 | 33.42 | 6.83 | 348 | 10 | 16.31 | 33.42 | 6.79 | 24.48 | 346 | 0.04 |
| 23 | 12.01 | 33.40 | 5.56 | 262 | 20 | 13.20 | 33.40 | 6.01 | 25.13 | 284 | 0.07 |
| 45 | - | 33.58 | 3.44 | | 30 | 11.26 | 33.42 | 4.99 | 25.52 | 247 | 0.09 |
| 67 | 9.48 | 33.78 | 2.95 | 191 | 50 | 10.00 | 33.63 | 3.25 | 25.90 | 211 | 0.14 |
| 89 | 9.16 | 33.89 | 2.80 | 178 | 75 | 9.33 | 33.83 | 2.87 | 26.17 | 185 | 0.19 |
| 137 | 8.91 | 34.02 | 2.29 | 165 | 100 | 9.07 | 33.92 | 2.69 | 26.28 | 175 | 0.23 |
| 181 | 8.61 | 34.14 | 2.02 | 152 | 150 | 8.81 | 34.06 | 2.20 | 26.43 | 160 | 0.32 |
| 225 | 8.40 | 34.20 | 1.59 | 144 | 200 | 8.52 | 34.17 | 1.83 | 26.56 | 148 | 0.40 |
| 270 | 8.20 | 34.20 | 1.34 | 141 | 250 | 8.28 | 34.20 | 1.43 | 26.62 | 142 | 0.47 |
| 319 | 8.00 | 34.23 | 1.13 | 136 | 300 | 8.06 | 34.21 | 1.20 | 26.67 | 138 | 0.55 |
| 367 | 7.34 | 34.24 | 0.82 | 126 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

YELLOWFIN; June 3, 1952; 2053 GCT; 33°40'N, 118°58.5'W; sounding, 465 fm; wind, 260°, force 2; weather, cloudy; sea, missing; wire angle, 14°. 87.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.99 | 33.44 | 5.64 | 359 | 0 | 16.99 | 33.44 | 5.64 | 24.34 | 359 | 0.00 |
| 10 | 16.57 | 33.42 | 5.78 | 352 | 10 | 16.57 | 33.42 | 5.78 | 24.42 | 352 | 0.04 |
| 24 | 13.14 | 33.39 | 6.54 | 283 | 20 | 15.94 | 33.40 | 6.51 | 24.55 | 339 | 0.07 |
| 48 | - | 33.35 | 4.78 | | 30 | 11.70 | 33.38 | 6.49 | 25.41 | 258 | 0.10 |
| 73 | 9.55 | 33.57 | 3.88 | 208 | 50 | 10.29 | 33.35 | 4.72 | 25.64 | 236 | 0.15 |
| 97 | 9.08 | 33.73 | 3.38 | 189 | 75 | 9.48 | 33.57 | 3.82 | 25.94 | 207 | 0.21 |
| 149 | 8.76 | 34.04 | 2.53 | 161 | 100 | 9.04 | 33.75 | 3.30 | 26.15 | 187 | 0.25 |
| 197 | 8.26 | 34.09 | 2.09 | 150 | 150 | 8.73 | 34.04 | 2.51 | 26.43 | 161 | 0.34 |
| 245 | 8.01 | 34.18 | 1.58 | 140 | 200 | 8.23 | 34.09 | 2.05 | 26.55 | 150 | 0.42 |
| 291 | 7.62 | 34.23 | 1.12 | 131 | 250 | 7.99 | 34.19 | 1.51 | 26.66 | 139 | 0.50 |
| 390 | 6.84 | 34.27 | 0.76 | 117 | 300 | 7.54 | 34.23 | 1.07 | 26.76 | 130 | 0.57 |
| 485 | 6.20 | 34.29 | 0.39 | 108 | 400 | 6.77 | 34.27 | 0.70 | 26.90 | 116 | 0.69 |
| 586 | 5.66 | 34.36 | 0.33 | 96 | 500 | 6.11 | 34.29 | 0.38 | 27.00 | 107 | 0.81 |
| 683 | 5.28 | 34.34 | 0.30 | 93 | 600 | 5.60 | 34.36 | 0.32 | 27.12 | 95 | 0.92 |
| 787 | 5.12 | 34.42 | 0.21 | 85 | 700 | 5.23 | 34.35 | 0.30 | 27.16 | 92 | 1.02 |
| | | | | | 800 | (5.11) | (34.43) | | (27.23) | (85) | (1.12) |

YELLOWFIN; June 4, 1952; 0258 GCT; 33°20'N, 119°39.5'W; sounding, 40 fm; wind, 190°, force 1; weather, cloudy; sea, slight; wire angle, 01°. 87.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.85 | 33.45 | 5.97 | 334 | 0 | 15.85 | 33.45 | 5.97 | 24.61 | 334 | 0.00 |
| 10 | 15.11 | 33.42 | 6.15 | 320 | 10 | 15.11 | 33.42 | 6.15 | 24.75 | 320 | 0.03 |
| 20 | 10.89 | 33.63 | 4.50 | 225 | 20 | 10.89 | 33.63 | 4.50 | 25.75 | 225 | 0.06 |
| 30 | 10.15 | 33.68 | 3.70 | 209 | 30 | 10.15 | 33.68 | 3.70 | 25.92 | 209 | 0.08 |
| 50 | 9.46 | 33.75 | 2.95 | 193 | 50 | 9.46 | 33.75 | 2.95 | 26.09 | 193 | 0.12 |

YELLOWFIN; June 4, 1952; 0853 GCT; 32°57.5'N, 120°20'W; sounding, 430 fm; wind, calm; weather, overcast; sea, slight; wire angle, 03°. 87.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.27 | 33.35 | 6.06 | 289 | 0 | 13.27 | 33.35 | 6.06 | 25.08 | 289 | 0.00 |
| 10 | 12.88 | 33.39 | 6.03 | 279 | 10 | 12.88 | 33.39 | 6.03 | 25.19 | 279 | 0.03 |
| 25 | 12.57 | 33.46 | 5.85 | 268 | 20 | 12.67 | 33.46 | 5.94 | 25.29 | 269 | 0.06 |
| 50 | 11.21 | 33.39 | 5.29 | 249 | 30 | 12.44 | 33.45 | 5.73 | 25.32 | 266 | 0.08 |
| 75 | 10.48 | 33.42 | 4.38 | 234 | 50 | 11.21 | 33.39 | 5.29 | 25.51 | 249 | 0.13 |
| 99 | 9.39 | 33.58 | 3.63 | 205 | 75 | 10.48 | 33.42 | 4.38 | 25.66 | 234 | 0.19 |
| 153 | 8.58 | 33.91 | 2.73 | 168 | 100 | 9.34 | 33.59 | 3.59 | 25.98 | 203 | 0.25 |
| 203 | 8.24 | 34.02 | 2.40 | 155 | 150 | 8.60 | 33.90 | 2.75 | 26.34 | 169 | 0.34 |
| 252 | 7.34 | 34.05 | 2.00 | 140 | 200 | 8.25 | 34.01 | 2.41 | 26.48 | 156 | 0.43 |
| 301 | 6.96 | 34.06 | 1.73 | 135 | 250 | 7.37 | 34.05 | 2.02 | 26.64 | 141 | 0.50 |
| 405 | 6.00 | 34.11 | 1.04 | 119 | 300 | 6.96 | 34.06 | 1.74 | 26.71 | 135 | 0.57 |
| 504 | 5.56 | 34.25 | 0.37 | 103 | 400 | 6.04 | 34.11 | 1.09 | 26.87 | 119 | 0.71 |
| 609 | 5.19 | 34.31 | 0.29 | 95 | 500 | 5.58 | 34.24 | 0.39 | 27.03 | 104 | 0.82 |
| | | | | | 600 | 5.21 | 34.31 | 0.29 | 27.13 | 95 | 0.93 |

YELLOWFIN; June 4, 1952; 1514 GCT; 32°39.5'N, 121°02'W; sounding, 2100 fm; wind, 320°, force 1; weather, overcast; sea, rough; wire angle, 04°. 87.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.22 | 33.21 | 6.01 | 298 | 0 | 13.22 | 33.21 | 6.01 | 24.98 | 298 | 0.00 |
| 10 | - | 33.21 | 5.38 | | 10 | 13.02 | 33.21 | 5.38 | 25.02 | 294 | 0.03 |
| 26 | 12.72 | 33.21 | 5.79 | 289 | 20 | 12.82 | 33.21 | 5.63 | 25.06 | 291 | 0.06 |
| 50 | 12.22 | 33.30 | 5.86 | 273 | 30 | 12.63 | 33.21 | 5.81 | 25.10 | 287 | 0.09 |
| 75 | 11.32 | 33.33 | 5.06 | 255 | 50 | 12.22 | 33.30 | 5.86 | 25.25 | 273 | 0.14 |
| 99 | 9.77 | 33.57 | 3.65 | 212 | 75 | 11.32 | 33.33 | 5.06 | 25.44 | 255 | 0.21 |
| 152 | 8.74 | 33.84 | 2.75 | 176 | 100 | 9.75 | 33.58 | 3.60 | 25.91 | 210 | 0.27 |
| 201 | 8.20 | 34.05 | 2.18 | 152 | 150 | 8.79 | 33.83 | 2.79 | 26.26 | 177 | 0.37 |
| 249 | 7.72 | 34.09 | 1.66 | 143 | 200 | 8.21 | 34.05 | 2.19 | 26.52 | 152 | 0.45 |
| 298 | 7.37 | 34.14 | 1.24 | 134 | 250 | 7.70 | 34.09 | 1.63 | 26.62 | 142 | 0.53 |
| 402 | 6.28 | 34.13 | 0.97 | 121 | 300 | 7.36 | 34.14 | 1.22 | 26.71 | 134 | 0.60 |
| 500 | 5.90 | 34.23 | 0.46 | 109 | 400 | 6.29 | 34.13 | 0.97 | 26.85 | 121 | 0.73 |
| 605 | 5.30 | 34.31 | 0.33 | 96 | 500 | 5.90 | 34.23 | 0.46 | 26.98 | 109 | 0.85 |
| | | | | | 600 | 5.33 | 34.31 | 0.34 | 27.11 | 96 | 0.96 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

87.80 YELLOWFIN; June 4, 1952; 2048 GCT; 32°12'N, 121°43'W; sounding, 2100 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.24 | 33.17 | 6.08 | 321 | 0 | 14.24 | 33.17 | 6.08 | 24.74 | 321 | 0.00 |
| 10 | 13.61 | 33.17 | 6.18 | 309 | 10 | 13.61 | 33.17 | 6.18 | 24.87 | 309 | 0.03 |
| 25 | 13.22 | 33.17 | 6.10 | 301 | 20 | 13.23 | 33.17 | 6.15 | 24.95 | 301 | 0.06 |
| 50 | - | 33.30 | 5.44 | | 30 | (13.00) | 33.17 | 6.00 | (25.00) | (297) | (0.09) |
| 76 | 10.64 | 33.35 | 4.95 | 242 | 50 | (11.28) | 33.30 | 5.44 | (25.42) | (256) | (0.15) |
| 102 | 9.77 | 33.42 | 4.11 | 223 | 75 | (10.64) | 33.35 | 4.95 | (25.58) | (242) | (0.21) |
| 159 | 8.74 | 33.77 | 3.11 | 181 | 100 | 9.83 | 33.41 | 4.19 | 25.76 | 224 | (0.27) |
| 208 | 8.18 | 33.91 | 2.97 | 162 | 150 | 8.89 | 33.71 | 3.19 | 26.15 | 188 | (0.37) |
| 257 | 7.71 | 34.04 | 2.26 | 146 | 200 | 8.26 | 33.89 | 2.99 | 26.38 | 165 | (0.46) |
| 305 | 7.56 | 34.16 | 1.35 | 135 | 250 | 7.76 | 34.02 | 2.39 | 26.56 | 148 | (0.54) |
| 408 | 5.98 | 34.13 | 0.63 | 117 | 300 | 7.59 | 34.15 | 1.44 | 26.69 | 136 | (0.62) |
| 507 | 5.41 | 34.20 | 0.43 | 105 | 400 | 6.05 | 34.13 | 0.67 | 26.88 | 118 | (0.75) |
| 612 | 4.99 | 34.29 | 0.47 | 94 | 500 | 5.45 | 34.19 | 0.43 | 27.00 | 106 | (0.87) |
| | | | | | 600 | 5.02 | 34.29 | 0.47 | 27.13 | 94 | (0.97) |

90.28 YELLOWFIN; June 7, 1952; 0007 GCT; 33°28.5'N, 117°46.5'W; sounding, 40 fm; wind, 300°, force 1; weather, partly cloudy; sea, missing; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.49 | 33.44a) | 5.90 | 371 | 0 | 17.49 | 33.44 | 5.90 | 24.22 | 371 | 0.00 |
| 10 | 16.47 | 33.46 | 6.06 | 346 | 10 | 16.47 | 33.46 | 6.06 | 24.48 | 346 | 0.04 |
| 20 | 11.92 | 33.33 | 4.68 | 265 | 20 | 11.92 | 33.33 | 4.68 | 25.33 | 265 | 0.07 |
| 30 | 10.73 | 33.44 | 4.65 | 237 | 30 | 10.73 | 33.44 | 4.65 | 25.63 | 237 | 0.09 |
| 50 | 9.86 | 33.60 | 3.52 | 211 | 50 | 9.86 | 33.60 | 3.52 | 25.90 | 211 | 0.14 |

90.30 YELLOWFIN; June 6, 1952; 2246 GCT; 33°24.5'N, 117°55'W; sounding, 340 fm; wind, 040°, force 1; weather, overcast; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.84 | 33.44 | - | 379 | 0 | 17.84 | 33.44 | | 24.14 | 379 | 0.00 |
| 10 | 15.69 | 33.37 | 6.01 | 336 | 10 | 15.69 | 33.37 | 6.01 | 24.58 | 336 | 0.04 |
| 25 | 12.63 | 33.33 | 6.00 | 278 | 20 | 13.51 | 33.34 | 6.00 | 25.03 | 294 | 0.07 |
| 50 | - | 33.35 | 4.53 | | 30 | 12.30 | 33.33 | 5.98 | 25.26 | 272 | 0.10 |
| 75 | 9.75 | 33.66 | 3.30 | 205 | 50 | 10.70 | 33.35 | 4.53 | 25.57 | 243 | 0.15 |
| 100 | 9.36 | 33.84 | 2.99 | 185 | 75 | 9.75 | 33.66 | 3.30 | 25.97 | 205 | 0.20 |
| 154 | 9.09 | 34.04 | 2.31 | 166 | 100 | 9.36 | 33.84 | 2.99 | 26.17 | 185 | 0.25 |
| 203 | 8.75 | 34.18 | 1.78 | 151 | 150 | 9.10 | 34.03 | 2.37 | 26.36 | 167 | 0.34 |
| 252 | 8.26 | 34.23 | 1.39 | 140 | 200 | 8.77 | 34.17 | 1.82 | 26.53 | 152 | 0.42 |
| 302 | 7.53 | 34.18 | 1.29 | 133 | 250 | 8.27 | 34.23 | 1.40 | 26.65 | 140 | 0.50 |
| 356 | 7.19 | 34.23 | 0.93 | 125 | 300 | 7.56 | 34.18 | 1.29 | 26.72 | 134 | 0.57 |
| 405 | 6.92 | 34.25 | 0.68 | 120 | 400 | 6.95 | 34.25 | 0.70 | 26.86 | 120 | 0.70 |
| 455 | 6.61 | 34.26 | 0.55 | 115 | 500 | 6.35 | 34.27 | 0.46 | 26.95 | 111 | 0.82 |
| 504 | 6.32 | 34.27 | 0.43 | 111 | | | | | | | |

90.37 YELLOWFIN; June 6, 1952; 1806 GCT; 33°11.5'N, 118°23.5'W; sounding, 610 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.08 | 33.39 | 5.60 | 365 | 0 | 17.08 | 33.39 | 5.60 | 24.28 | 365 | 0.00 |
| 10 | 16.94 | 33.39 | 5.49 | 362 | 10 | 16.94 | 33.39 | 5.49 | 24.31 | 362 | 0.04 |
| 25 | 13.35 | 33.35 | 6.63b) | 290 | 20 | 15.50 | 33.36 | 6.58 | 24.62 | 333 | 0.07 |
| 50 | 9.61 | 33.66 | 3.42 | 202 | 30 | 11.82 | 33.35 | 6.62 | 25.36 | 262 | 0.10 |
| 75 | 9.39 | 33.91 | 3.30 | 180 | 50 | 9.61 | 33.66 | 3.42 | 25.99 | 202 | 0.15 |
| 100 | 9.26 | 33.96 | 2.60 | 175 | 75 | 9.39 | 33.91 | 3.30 | 26.22 | 180 | 0.20 |
| 154 | 8.88 | 34.15 | 1.90 | 155 | 100 | 9.26 | 33.96 | 2.60 | 26.28 | 175 | 0.24 |
| 203 | 8.54 | 34.22 | 1.65 | 145 | 150 | 8.92 | 34.14 | 1.94 | 26.48 | 156 | 0.32 |
| 253 | 8.13 | 34.23 | 1.34 | 138 | 200 | 8.56 | 34.22 | 1.67 | 26.60 | 145 | 0.40 |
| 302 | 7.54 | 34.25 | 1.04 | 128 | 250 | 8.15 | 34.23 | 1.37 | 26.67 | 138 | 0.47 |
| 405 | 6.90 | 34.26 | 0.92 | 119 | 300 | 7.57 | 34.25 | 1.06 | 26.77 | 129 | 0.54 |
| 504 | 6.18 | 34.33 | 0.50 | 105 | 400 | 6.93 | 34.26 | 0.92 | 26.87 | 119 | 0.67 |
| 608 | 5.52 | 34.37 | 0.33 | 94 | 500 | 6.22 | 34.32 | 0.52 | 27.01 | 106 | 0.79 |
| 810 | 4.78 | 34.43 | 0.39 | 81 | 600 | 5.58 | 34.37 | 0.34 | 27.13 | 94 | 0.90 |
| 940 | 4.22 | 34.49 | 0.48 | 71 | 700 | 5.14 | 34.40 | 0.33 | 27.21 | 87 | 1.00 |
| | | | | | 800 | 4.81 | 34.43 | 0.38 | 27.27 | 81 | 1.09 |
| | | | | | 1000 | (4.00) | (34.51) | | (27.42) | (67) | (1.26) |

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in correct order.

b) Alternate value, 3.81 ml/L, not used in interpolation.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| YELLOWFIN; June 6, 1952; 1338 GCT; 32°55.5'N, 118°56.5'W; sounding, 820 fm; wind, 120°, force 1; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | 90.45 |
| 0 | 15.68 | 33.48 | 5.88 | 328 | 0 | 15.68 | 33.48 | 5.88 | 24.67 | 328 | 0.00 |
| 10 | 14.69 | 33.49 | 6.28 | 307 | 10 | 14.69 | 33.49 | 6.28 | 24.90 | 307 | 0.03 |
| 25 | 10.94 | 33.53 | 5.04 | 234 | 20 | 12.27 | 33.51 | 5.82 | 25.40 | 258 | 0.06 |
| 50 | - | 33.71 | 3.27 | | 30 | 10.60 | 33.55 | 4.41 | 25.74 | 226 | 0.08 |
| 75 | 9.05 | 33.89 | 2.79 | 177 | 50 | 9.71 | 33.71 | 3.27 | 26.01 | 200 | 0.13 |
| 100 | 8.67 | 33.93 | 2.73 | 168 | 75 | 9.05 | 33.89 | 2.79 | 26.26 | 177 | 0.17 |
| 155 | 8.41 | 34.13 | 1.89 | 149 | 100 | 8.67 | 33.93 | 2.73 | 26.35 | 168 | 0.22 |
| 205 | 8.38 | 34.22 | 1.30 | 142 | 150 | 8.42 | 34.12 | 1.99 | 26.54 | 150 | 0.30 |
| 255 | 7.79 | 34.27 | 1.04 | 130 | 200 | 8.40 | 34.21 | 1.34 | 26.61 | 143 | 0.37 |
| 304 | 7.45 | 34.31 | 0.84 | 122 | 250 | 7.85 | 34.26 | 1.07 | 26.74 | 132 | 0.44 |
| 407 | 6.64 | 34.29 | 0.55 | 113 | 300 | 7.48 | 34.31 | 0.86 | 26.83 | 123 | 0.51 |
| 506 | 6.01 | 34.33 | 0.47 | 103 | 400 | 6.71 | 34.29 | 0.57 | 26.92 | 114 | 0.63 |
| 610 | 5.39 | 34.36 | 0.36 | 93 | 500 | 6.04 | 34.33 | 0.47 | 27.04 | 103 | 0.75 |
| | | | | | 600 | 5.45 | 34.36 | 0.37 | 27.14 | 94 | 0.85 |
| YELLOWFIN; June 6, 1952; 0853 GCT; 32°39.5'N, 119°30'W; sounding, 750 fm; wind, calm; weather, overcast; sea, slight; wire angle, 06°. | | | | | | | | | | | 90.53 |
| 0 | 15.13 | 33.19 | 5.78 | 338 | 0 | 15.13 | 33.19 | 5.78 | 24.57 | 338 | 0.00 |
| 10 | 14.26 | 33.17 | 6.01 | 321 | 10 | 14.26 | 33.17 | 6.01 | 24.74 | 321 | 0.03 |
| 25 | 13.18 | 33.17 | 6.10 | 300 | 20 | 13.55 | 33.17 | 6.08 | 24.89 | 307 | 0.06 |
| 50 | 11.95 | 33.28 | 6.43 | 270 | 30 | 12.92 | 33.18 | 6.12 | 25.02 | 295 | 0.09 |
| 74 | 10.10 | 33.35 | 4.38 | 233 | 50 | 11.95 | 33.28 | 6.43 | 25.28 | 270 | 0.15 |
| 99 | 9.22 | 33.68 | 3.57 | 195 | 75 | 10.10 | 33.35 | 4.38 | 25.67 | 233 | 0.21 |
| 153 | 8.44 | 33.98 | 2.38 | 161 | 100 | 9.21 | 33.68 | 3.56 | 26.07 | 195 | 0.27 |
| 201 | 8.12 | 34.09 | 1.84 | 148 | 150 | 8.47 | 33.97 | 2.46 | 26.42 | 162 | 0.36 |
| 249 | 7.82 | 34.22 | 1.19 | 134 | 200 | 8.13 | 34.09 | 1.87 | 26.56 | 148 | 0.44 |
| 298 | 6.91 | 34.16 | 1.16 | 126 | 250 | 7.81 | 34.22 | 1.19 | 26.71 | 134 | 0.51 |
| 400 | 6.50 | 34.24 | 0.57 | 115 | 300 | 6.90 | 34.16 | 1.15 | 26.79 | 126 | 0.58 |
| 497 | 6.12 | 34.27 | 0.37 | 108 | 400 | 6.50 | 34.24 | 0.57 | 26.91 | 115 | 0.70 |
| 601 | 5.44 | 34.18u | 0.31 | | 500 | 6.11 | 34.27 | 0.37 | 26.98 | 108 | 0.82 |
| 802 | 4.81 | 34.20u | 0.30 | | 600 | 5.45 | | 0.31 | | | |
| 931 | 4.30 | 34.47 | 0.38 | 73 | 700 | 5.13 | | 0.30 | | | |
| | | | | | 800 | 4.81 | | 0.30 | | | |
| YELLOWFIN; June 6, 1952; 0433 GCT; 32°25.5'N, 119°59.5'W; sounding, 780 fm; wind, 240°, force 1; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | | 90.60 |
| 0 | 15.27 | 33.19 | 5.77 | 341 | 0 | 15.27 | 33.19 | 5.77 | 24.54 | 341 | 0.00 |
| 10 | 14.90 | 33.19 | 5.94 | 333 | 10 | 14.90 | 33.19 | 5.94 | 24.62 | 333 | 0.03 |
| 25 | 14.54 | 33.16 | 5.80 | 328 | 20 | 14.66 | 33.18 | 5.90 | 24.66 | 329 | 0.07 |
| 50 | - | 33.06 | 6.05 | | 30 | 14.44 | 33.14 | 5.80 | 24.68 | 327 | 0.10 |
| 75 | 11.91 | 33.12 | 5.70 | 281 | 50 | 13.38 | 33.06 | 6.05 | 24.84 | 312 | 0.16 |
| 100 | 9.82 | 33.30 | 4.54 | 232 | 75 | 11.91 | 33.12 | 5.70 | 25.17 | 281 | 0.24 |
| 154 | 8.76 | 33.98 | 3.15 | 166 | 100 | 9.82 | 33.30 | 4.54 | 25.68 | 232 | 0.30 |
| 204 | 8.00 | 34.04 | 2.84 | 150 | 150 | 8.84 | 33.97 | 3.20 | 26.36 | 168 | 0.40 |
| 253 | 7.24 | 34.05 | 2.78 | 139 | 200 | 8.07 | 34.04 | 2.85 | 26.53 | 151 | 0.49 |
| 303 | 6.82 | 34.04 | 1.91 | 134 | 250 | 7.29 | 34.05 | 2.80 | 26.65 | 140 | 0.56 |
| 407 | 6.16 | 34.13 | 0.85 | 119 | 300 | 6.84 | 34.04 | 1.98 | 26.71 | 135 | 0.63 |
| 506 | 5.80 | 34.23 | 0.43 | 108 | 400 | 6.20 | 34.12 | 0.90 | 26.85 | 121 | 0.76 |
| 610 | 5.28 | 34.33 | 0.35 | 94 | 500 | 5.82 | 34.22 | 0.46 | 26.98 | 108 | 0.88 |
| | | | | | 600 | 5.33 | 34.32 | 0.35 | 27.12 | 95 | 0.99 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 90.70 | YELLOWFIN; June 5, 1952; 2250 GCT; 32°04.5'N, 120°39'W; sounding, 2100 fm; wind, 240°, force 1; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 16.10 | 33.22 | 5.95 | 356 | 0 | 16.10 | 33.22 | 5.95 | 24.38 | 356 | 0.00 |
| 10 | 15.43 | 33.22 | 5.71 | 342 | 10 | 15.43 | 33.22 | 5.71 | 24.53 | 342 | 0.03 |
| 25 | 15.27 | 33.19 | 5.82 | 341 | 20 | 15.31 | 33.20 | 5.75 | 24.54 | 341 | 0.07 |
| 50 | - | 32.95 | 6.32 | | 30 | 15.23 | 33.16 | 5.93 | 24.53 | 342 | 0.10 |
| 74 | 11.23 | 33.01 | 5.74 | 277 | 50 | 12.99 | 32.95 | 6.32 | 24.83 | 313 | 0.17 |
| 98 | 10.23 | 33.21 | 4.67 | 246 | 75 | 11.27 | 33.01 | 5.72 | 25.20 | 278 | 0.24 |
| 152 | 8.71 | 33.68 | 3.67 | 187 | 100 | 10.21 | 33.22 | 4.62 | 25.55 | 244 | 0.31 |
| 201 | 8.34 | 33.96 | 2.79 | 161 | 150 | 8.78 | 33.68 | 3.71 | 26.14 | 188 | 0.42 |
| 249 | 7.73 | 34.02 | 2.89 | 148 | 200 | 8.35 | 33.96 | 2.80 | 26.43 | 161 | 0.51 |
| 298 | 7.41 | 34.00 | 2.84 | 145 | 250 | 7.72 | 34.02 | 2.89 | 26.57 | 148 | 0.59 |
| 400 | 6.18 | 34.13 | 1.06 | 120 | 300 | 7.40 | 34.00 | 2.83 | 26.60 | 145 | 0.66 |
| 496 | 5.55 | 34.23 | 0.55 | 105 | 400 | 6.18 | 34.13 | 1.06 | 26.86 | 120 | 0.80 |
| 599 | 5.13 | 34.34 | 0.37 | 92 | 500 | 5.55 | 34.24 | 0.54 | 27.03 | 104 | 0.92 |
| 800 | 4.44 | 34.42 | 0.38 | 78 | 600 | 5.14 | 34.34 | 0.37 | 27.16 | 92 | 1.02 |
| 929 | 4.04 | 34.45 | 0.49 | 72 | 700 | 4.80 | 34.39 | 0.37 | 27.24 | 84 | 1.12 |
| | | | | | 800 | 4.44 | 34.42 | 0.38 | 27.30 | 78 | 1.20 |
| | | | | | 1000 | (3.94) | (34.46) | | (27.38) | (70) | (1.37) |
| 90.80 | YELLOWFIN; June 5, 1952; 1802 GCT; 31°48.5'N, 121°14'W; sounding, 2000 fm; wind, 190°, force 1; weather, overcast; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 15.64 | 33.22 | 5.79 | 346 | 0 | 15.64 | 33.22 | 5.79 | 24.48 | 346 | 0.00 |
| 10 | 15.35 | 33.22 | 5.76 | 340 | 10 | 15.35 | 33.22 | 5.76 | 24.55 | 340 | 0.03 |
| 25 | 15.08 | 33.21 | 5.81 | 335 | 20 | 15.12 | 33.22 | 5.78 | 24.60 | 335 | 0.07 |
| 50 | 13.54 | 33.15 | 6.14 | 309 | 30 | 15.05 | 33.20 | 5.83 | 24.60 | 335 | 0.10 |
| 75 | 11.66 | 33.15 | 5.65 | 274 | 50 | 13.54 | 33.15 | 6.14 | 24.87 | 309 | 0.17 |
| 99 | 10.06 | 33.28 | 4.73 | 238 | 75 | 11.66 | 33.15 | 5.65 | 25.24 | 274 | 0.24 |
| 154 | 8.83 | 33.73 | 3.40 | 185 | 100 | 10.06 | 33.29 | 4.72 | 25.63 | 237 | 0.30 |
| 203 | 8.34 | 33.96 | 2.69 | 161 | 150 | 8.91 | 33.69 | 3.50 | 26.13 | 189 | 0.41 |
| 252 | 7.51 | 34.00 | 2.51 | 146 | 200 | 8.40 | 33.95 | 2.72 | 26.41 | 163 | 0.50 |
| 301 | 6.78 | 34.09 | 2.15 | 130 | 250 | 7.57 | 34.00 | 2.52 | 26.57 | 147 | 0.58 |
| 405 | 6.12 | 34.16 | 0.80 | 117 | 300 | 6.81 | 34.09 | 2.17 | 26.75 | 130 | 0.65 |
| 504 | 5.50 | 34.23 | 0.49 | 104 | 400 | 6.15 | 34.16 | 0.83 | 26.89 | 117 | 0.78 |
| 609 | 5.13 | 34.31 | 0.39 | 94 | 500 | 5.52 | 34.22 | 0.50 | 27.02 | 105 | 0.90 |
| | | | | | 600 | 5.17 | 34.30 | 0.40 | 27.12 | 95 | 1.00 |
| 90.90 | YELLOWFIN; June 5, 1952; 1312 GCT; 31°25'N, 121°59'W; sounding, 2000 fm; wind, 260°, force 1; weather, overcast; sea, slight; wire angle, 13°. | | | | | | | | | | |
| 0 | 15.43 | 33.15 | 5.88 | 347 | 0 | 15.43 | 33.15 | 5.88 | 24.47 | 347 | 0.00 |
| 10 | 15.37 | 33.12 | 5.84 | 348 | 10 | 15.37 | 33.12 | 5.84 | 24.46 | 348 | 0.03 |
| 24 | 15.27 | 33.19 | 5.67 | 341 | 20 | 15.29 | 33.16 | 5.69 | 24.51 | 343 | 0.07 |
| 48 | 13.56 | 33.03 | 6.15 | 318 | 30 | 15.19 | 33.17 | 5.69 | 24.54 | 340 | 0.10 |
| 73 | 12.83 | 32.97 | 6.06 | 308 | 50 | 13.47 | 33.02 | 6.15 | 24.79 | 317 | 0.17 |
| 97 | 11.70 | 33.03 | 5.71 | 284 | 75 | 12.80 | 32.97 | 6.03 | 24.88 | 308 | 0.25 |
| 149 | 9.02 | 33.39 | 4.25 | 213 | 100 | 11.63 | 33.03 | 5.68 | 25.15 | 282 | 0.32 |
| 196 | 8.68 | 33.82 | 3.19 | 176 | 150 | 8.99 | 33.41 | 4.25 | 25.90 | 211 | 0.45 |
| 244 | 8.17 | 34.00 | 2.55 | 156 | 200 | 8.64 | 33.84 | 3.12 | 26.29 | 174 | 0.54 |
| | | | | | 250 | (8.09) | (34.01) | (2.51) | (26.50) | (154) | (0.63) |
| 90.100 | YELLOWFIN; June 5, 1952; 0618 GCT; 31°04.5'N, 122°40'W; sounding, 2200 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | 16.44 | 33.40 | 5.64 | 350 | 0 | 16.44 | 33.40 | 5.64 | 24.44 | 350 | 0.00 |
| 10 | 16.07 | 33.42 | 5.70 | 341 | 10 | 16.07 | 33.42 | 5.70 | 24.54 | 341 | 0.03 |
| 25 | 16.16 | 33.39 | 5.58 | 345 | 20 | 16.13 | 33.40 | 5.58 | 24.51 | 343 | 0.07 |
| 50 | 15.81 | 33.39 | 5.60 | 337 | 30 | 16.16 | 33.39 | 5.58 | 24.49 | 345 | 0.10 |
| 75 | 15.05 | 33.37 | 5.77 | 323 | 50 | 15.81 | 33.39 | 5.60 | 24.57 | 337 | 0.17 |
| 99 | 14.32 | 33.31 | 5.82 | 312 | 75 | 15.05 | 33.37 | 5.77 | 24.73 | 323 | 0.25 |
| 153 | 10.30 | 33.28 | 4.92 | 241 | 100 | 14.32 | 33.31 | 5.81 | 24.84 | 312 | 0.33 |
| 202 | 8.89 | 33.71 | 3.81 | 188 | 150 | 10.50 | 33.28 | 4.99 | 25.55 | 245 | 0.48 |
| 251 | 8.18 | 33.93 | 3.14 | 161 | 200 | 8.98 | 33.66 | 3.88 | 26.09 | 193 | 0.59 |
| 300 | 7.56 | 34.05 | 2.54 | 143 | 250 | 8.20 | 33.93 | 3.16 | 26.43 | 161 | 0.68 |
| 404 | 6.58 | 34.11 | 1.26 | 126 | 300 | 7.56 | 34.05 | 2.54 | 26.61 | 143 | 0.76 |
| 502 | 5.90 | 34.16 | - | 114 | 400 | 6.60 | 34.11 | 1.30 | 26.79 | 126 | 0.90 |
| 606 | 5.40 | 34.31 | - | 97 | 500 | 5.91 | 34.16 | | 26.92 | 114 | 1.02 |
| | | | | | 600 | 5.43 | 34.30 | | 27.09 | 98 | 1.13 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| YELLOWFIN; June 7, 1952; 0518 GCT; 32°56'N, 117°19'W; sounding, 75 fm; wind, 260°, force 2; weather, partly cloudy; sea, missing; wire angle, 05°. | | | | | | | | | | | 93.27 |
| 0 | 16.28 | 33.42 | 6.15 | 345 | 0 | 16.28 | 33.42 | 6.15 | 24.49 | 345 | 0.00 |
| 10 | 13.87 | 33.37 | 6.54 | 299 | 10 | 13.87 | 33.37 | 6.54 | 24.98 | 299 | 0.03 |
| 20 | 10.90 | 33.44 | 5.12 | 240 | 20 | 10.90 | 33.44 | 5.12 | 25.60 | 240 | 0.06 |
| 30 | 10.18 | 33.58 | 3.67 | 217 | 30 | 10.18 | 33.58 | 3.67 | 25.83 | 217 | 0.08 |
| 50 | 9.64 | 33.68 | 3.31 | 201 | 50 | 9.64 | 33.68 | 3.31 | 26.00 | 201 | 0.12 |
| 75 | 9.40 | 33.80 | 2.89 | 189 | 75 | 9.40 | 33.80 | 2.89 | 26.14 | 189 | 0.17 |
| 100 | 9.28 | 33.93 | 2.71 | 177 | 100 | 9.28 | 33.93 | 2.71 | 26.26 | 177 | 0.22 |
| 124 | - | 34.02 | 2.34 | | | | | | | | |
| YELLOWFIN; June 7, 1952; 0732 GCT; 32°50'N, 117°31.5'W; sounding, 450 fm; wind, 270°, force 3; weather, cloudy; sea, missing; wire angle, 03°. | | | | | | | | | | | 93.30 |
| 0 | 17.49 | 33.42 | 5.55 | 372 | 0 | 17.49 | 33.42 | 5.55 | 24.21 | 372 | 0.00 |
| 10 | 16.19 | 33.37 | 6.26 | 347 | 10 | 16.19 | 33.37 | 6.26 | 24.47 | 347 | 0.04 |
| 25 | 12.23 | 33.31 | 6.55 | 272 | 20 | 12.62 | 33.32 | 6.52 | 25.19 | 279 | 0.07 |
| 50 | 10.10 | 33.58 | 3.87 | 216 | 30 | 11.71 | 33.31 | 6.53 | 25.35 | 263 | 0.09 |
| 75 | 9.50 | 33.76 | 3.24 | 193 | 50 | 10.10 | 33.58 | 3.87 | 25.85 | 216 | 0.14 |
| 100 | 9.47 | 34.00 | 2.53 | 175 | 75 | 9.50 | 33.76 | 3.24 | 26.09 | 193 | 0.19 |
| 155 | 9.13 | 34.13 | 1.89 | 160 | 100 | 9.47 | 34.00 | 2.53 | 26.28 | 175 | 0.24 |
| 204 | 8.95 | 34.13 | 1.25 | 157 | 150 | 9.16 | 34.12 | 1.96 | 26.42 | 161 | 0.33 |
| 254 | 8.71 | 34.29 | 1.03 | 142 | 200 | 8.97 | 34.13 | 1.28 | 26.46 | 158 | 0.41 |
| 303 | 8.38 | 34.33 | 0.98 | 134 | 250 | 8.73 | 34.28 | 1.03 | 26.62 | 143 | 0.48 |
| 407 | 7.56 | 34.37 | 0.60 | 120 | 300 | 8.40 | 34.33 | 0.98 | 26.71 | 134 | 0.56 |
| 506 | 6.31 | 34.31 | 0.45 | 108 | 400 | 7.62 | 34.37 | 0.63 | 26.86 | 120 | 0.69 |
| 610 | 5.76 | 34.38 | 0.45 | 96 | 500 | 6.39 | 34.31 | 0.45 | 26.98 | 109 | 0.81 |
| | | | | | 600 | 5.81 | 34.37 | 0.45 | 27.10 | 97 | 0.92 |
| YELLOWFIN; June 7, 1952; 1322 GCT; 32°30'N, 118°12.5'W; sounding, 740 fm; wind, 270°, force 2; weather, overcast; sea, slight; wire angle, 10°. | | | | | | | | | | | 93.40 |
| 0 | 15.51 | 33.21 | 5.82 | 344 | 0 | 15.51 | 33.21 | 5.82 | 24.50 | 344 | 0.00 |
| 10 | 13.85 | 33.18 | 6.03 | 313 | 10 | 13.85 | 33.18 | 6.03 | 24.83 | 313 | 0.03 |
| 25 | 12.41 | 33.19 | 5.77 | 285 | 20 | 12.81 | 33.19 | 5.90 | 25.05 | 292 | 0.06 |
| 49 | 11.66 | 33.54 | 5.31 | 245 | 30 | 12.01 | 33.21 | 5.70 | 25.22 | 276 | 0.09 |
| 74 | 9.53 | 33.71 | 3.02 | 197 | 50 | 11.67 | 33.54 | 5.21 | 25.54 | 245 | 0.14 |
| 98 | 9.08 | 33.80 | 2.89 | 184 | 75 | 9.54 | 33.71 | 3.01 | 26.04 | 198 | 0.20 |
| 151 | 8.60 | 33.96 | 2.57 | 165 | 100 | 9.08 | 33.80 | 2.88 | 26.19 | 184 | 0.25 |
| 199 | 8.08 | 34.07 | 2.04 | 149 | 150 | 8.60 | 33.96 | 2.58 | 26.39 | 165 | 0.34 |
| 246 | 7.64 | 34.16 | 1.34 | 136 | 200 | 8.07 | 34.07 | 2.01 | 26.55 | 149 | 0.42 |
| 294 | 7.32 | 34.20 | 1.11 | 129 | 250 | 7.63 | 34.17 | 1.32 | 26.70 | 135 | 0.49 |
| 396 | 6.68 | 34.25 | 0.65 | 117 | 300 | 7.30 | 34.20 | 1.08 | 26.77 | 129 | 0.56 |
| 493 | 6.11 | 34.20 | 0.35 | 113 | 400 | 6.64 | 34.25 | 0.62 | 26.90 | 116 | 0.68 |
| 597 | 5.42 | 34.27 | 0.32 | 100 | 500 | 6.08 | 34.20 | 0.35 | 26.93 | 113 | 0.81 |
| | | | | | 600 | (5.41) | (34.27) | (0.32) | (27.07) | (100) | (0.92) |
| YELLOWFIN; June 7, 1952; 1850 GCT; 32°10'N, 118°53.5'W; sounding, 655 fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 17°. | | | | | | | | | | | 93.50 |
| 0 | 15.90 | 33.44 | 6.10 | 336 | 0 | 15.90 | 33.44 | 6.10 | 24.59 | 336 | 0.00 |
| 10 | 13.01 | 33.42 | 6.12 | 279 | 10 | 13.01 | 33.42 | 6.12 | 25.19 | 279 | 0.03 |
| 24 | 12.15 | 33.39 | 5.62 | 265 | 20 | 12.40 | 33.40 | 5.87 | 25.29 | 269 | 0.06 |
| 53 | 9.65 | 33.24 | 4.16 | 234 | 30 | 11.62 | 33.36 | 5.30 | 25.41 | 258 | 0.08 |
| 77 | 9.08 | 33.53 | 3.59 | 204 | 50 | 9.83 | 33.24 | 4.29 | 25.63 | 237 | 0.13 |
| 105 | 8.80 | 33.87 | 2.72 | 174 | 75 | 9.09 | 33.51 | 3.65 | 25.96 | 205 | 0.19 |
| 157 | 8.50 | 34.09 | 1.81 | 154 | 100 | 8.83 | 33.80 | 2.88 | 26.23 | 180 | 0.24 |
| 210 | 8.10 | 34.20 | 1.43 | 140 | 150 | 8.53 | 34.08 | 1.88 | 26.49 | 155 | 0.32 |
| 266 | 7.66 | 34.24 | 1.01 | 131 | 200 | 8.19 | 34.18 | 1.49 | 26.62 | 142 | 0.40 |
| 314 | 7.26 | 34.31 | 0.83 | 120 | 250 | 7.79 | 34.23 | 1.13 | 26.72 | 133 | 0.47 |
| 424 | 6.42 | 34.31 | 0.41 | 109 | 300 | 7.38 | 34.30 | 0.88 | 26.84 | 122 | 0.54 |
| 530 | 5.78 | 34.34 | 0.34 | 99 | 400 | 6.60 | 34.31 | 0.50 | 26.95 | 111 | 0.66 |
| 638 | 5.24 | 34.33 | 0.42 | 94 | 500 | 5.93 | 34.33 | 0.34 | 27.05 | 102 | 0.77 |
| | | | | | 600 | 5.41 | 34.33 | 0.39 | 27.12 | 95 | 0.88 |

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5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

93.60 YELLOWFIN; June 8, 1952; 0010 GCT; 31°48.5'N, 119°32'W; sounding, 340 fm; wind, 300°, force 4; weather, partly cloudy; sea, rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.76 | 33.15 | 5.74 | 354 | 0 | 15.76 | 33.15 | 5.74 | 24.40 | 354 | 0.00 |
| 10 | 15.37 | 33.17 | 5.78 | 344 | 10 | 15.37 | 33.17 | 5.78 | 24.50 | 344 | 0.03 |
| 25 | 14.92 | 33.12 | 5.84 | 338 | 20 | 15.09 | 33.14 | 5.80 | 24.54 | 340 | 0.07 |
| 55 | 13.25 | 33.06 | 6.09 | 310 | 30 | 14.70 | 33.11 | 5.88 | 24.60 | 335 | 0.10 |
| 79 | 11.48 | 33.06 | 5.71 | 278 | 50 | 13.67 | 33.07 | 6.08 | 24.79 | 317 | 0.17 |
| 109 | 9.97 | 33.08 | 4.99 | 251 | 75 | 11.74 | 33.06 | 5.80 | 25.15 | 282 | 0.24 |
| 163 | 8.87 | 33.71 | 3.51 | 187 | 100 | 10.24 | 33.07 | 5.19 | 25.43 | 256 | 0.31 |
| 216 | 8.03 | 33.98 | 2.67 | 155 | 150 | 9.12 | 33.54 | 3.87 | 25.98 | 204 | 0.43 |
| 274 | 7.47 | 34.14 | 1.73 | 135 | 200 | 8.28 | 33.92 | 2.91 | 26.41 | 163 | 0.52 |
| 323 | 7.12 | 34.20 | 1.08 | 126 | 250 | 7.67 | 34.09 | 2.12 | 26.63 | 142 | 0.60 |
| 435 | 6.42 | 34.24 | 0.68 | 114 | 300 | 7.28 | 34.18 | 1.34 | 26.76 | 130 | 0.67 |
| 543 | 5.90 | 34.29 | 0.39 | 104 | 400 | 6.63 | 34.23 | 0.78 | 26.88 | 118 | 0.80 |
| 651 | 5.36 | 34.33 | 0.40 | 95 | 500 | 6.12 | 34.27 | 0.49 | 26.98 | 108 | 0.92 |
| | | | | | 600 | 5.62 | 34.31 | 0.40 | 27.08 | 99 | 1.03 |

93.70 YELLOWFIN; June 8, 1952; 0533 GCT; 31°27.5'N, 120°13'W; sounding, 2200 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.56 | 33.31 | 5.34 | 359 | 0 | 16.56 | 33.31 | 5.34 | 24.34 | 359 | 0.00 |
| 10 | 16.58 | 33.32 | 5.66 | 359 | 10 | 16.58 | 33.32 | 5.66 | 24.34 | 359 | 0.04 |
| 25 | 15.42a) | 33.22 | 5.88 | 341 | 20 | 15.60 | 33.22 | 5.87 | 24.49 | 345 | 0.07 |
| 49 | 15.74a) | 33.49 | 5.69 | 328 | 30 | 15.46 | 33.23 | 5.87 | 24.53 | 342 | 0.11 |
| 74 | 15.31a) | 33.53 | 5.83 | 316 | 50 | 15.60 | 33.49 | 5.69 | 24.70 | 326 | 0.17 |
| 98 | 13.72 | 33.46 | 5.59 | 289 | 75 | 15.31 | 33.53 | 5.82 | 24.79 | 316 | 0.25 |
| 151 | 9.54 | 33.53 | 4.46 | 211 | 100 | 13.49 | 33.46 | 5.52 | 25.12 | 285 | 0.33 |
| 199 | 8.62 | 33.89 | 3.76 | 170 | 150 | 9.59 | 33.53 | 4.49 | 25.89 | 212 | 0.45 |
| 248 | 7.74 | 33.98 | 3.09 | 151 | 200 | 8.60 | 33.89 | 3.76 | 26.33 | 170 | 0.55 |
| 296 | 7.23 | 34.05 | 2.19 | 139 | 250 | 7.72 | 33.98 | 3.08 | 26.54 | 151 | 0.63 |
| 397 | 6.35 | 34.13 | 1.17 | 122 | 300 | 7.19 | 34.05 | 2.12 | 26.67 | 138 | 0.71 |
| 495 | 5.92 | 34.29 | 0.59 | 104 | 400 | 6.33 | 34.13 | 1.14 | 26.84 | 121 | 0.84 |
| 598 | 5.48 | 34.34 | 0.35 | 96 | 500 | 5.90 | 34.29 | 0.57 | 27.03 | 104 | 0.96 |
| | | | | | 600 | (5.48) | (34.34) | (0.35) | (27.12) | (96) | (1.07) |

93.80 YELLOWFIN; June 8, 1952; 1047 GCT; 31°07'N, 120°53'W; sounding, 2000 fm; wind, 280°, force 3; weather, partly cloudy; sea, moderate; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.53 | 33.39 | 6.33 | 353 | 0 | 16.53 | 33.39 | 6.33 | 24.41 | 353 | 0.00 |
| 10 | 16.59 | 33.36 | 6.44 | 356 | 10 | 16.59 | 33.36 | 6.44 | 24.37 | 356 | 0.04 |
| 24 | 16.03 | 33.33 | 5.79 | 346 | 20 | 16.24 | 33.33 | 5.88 | 24.43 | 351 | 0.07 |
| 48 | 15.80 | 33.39 | 5.72 | 337 | 30 | 15.99 | 33.33 | 5.75 | 24.49 | 346 | 0.11 |
| 72 | 15.07 | 33.35 | 5.75 | 325 | 50 | 15.78 | 33.39 | 5.72 | 24.58 | 337 | 0.17 |
| 96 | 14.58 | 33.35 | 5.72 | 315 | 75 | 15.01 | 33.35 | 5.74 | 24.72 | 323 | 0.26 |
| 149 | 11.18 | 33.26 | 5.19 | 258 | 100 | 14.49 | 33.35 | 5.70 | 24.83 | 313 | 0.34 |
| 195 | 9.21 | 33.60 | 4.21 | 201 | 150 | 11.15 | 33.26 | 5.17 | 25.42 | 257 | 0.48 |
| 241 | 8.44 | 33.89 | 3.31 | 168 | 200 | 9.11 | 33.64 | 4.10 | 26.06 | 196 | 0.60 |
| 286 | 7.85 | 34.02 | 2.74 | 150 | 250 | 8.32 | 33.93 | 3.20 | 26.41 | 163 | 0.69 |
| 384 | 6.64 | 34.09 | 1.47 | 128 | 300 | 7.69 | 34.03 | 2.56 | 26.58 | 147 | 0.77 |
| 478 | 5.92 | 34.16 | 0.86 | 114 | 400 | 6.50 | 34.10 | 1.33 | 26.80 | 126 | 0.91 |
| 582 | 5.40 | 34.27 | 0.43 | 100 | 500 | 5.79 | 34.18 | 0.76 | 26.95 | 111 | 1.03 |
| | | | | | 600 | (5.34) | (34.29) | | (27.09) | (98) | (1.14) |

97.30 YELLOWFIN; June 10, 1952; 0241 GCT; 32°15.5'N, 117°09'W; sounding, 30 fm; wind, 290°, force 4; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 15.21 | 5.88 | 0 | 15.21 | 5.88 | | |
| 10 | 11.10 | 5.01 | 10 | 11.10 | 5.01 | | |
| 20 | 10.09 | 3.64 | 20 | 10.09 | 3.64 | | |
| 40 | 9.93 | 3.27 | 30 | 10.00 | 3.41 | | |

a) Temperatures of 16.3°C at 40 meters and 14.5°C at 60 meters were indicated by the bathythermograph observation.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| YELLOWFIN; June 14, 1952; 0126 GCT; 32°14'N, 117°08.5'W; sounding, 35 fm; wind, 280°, force 3; weather, clear; sea, rough; wire angle, 14°. [a] | | | | | | | | | | | 97.30 |
| 0 | 15.73 | 33.53 | 5.71 | 325 | 0 | 15.73 | 33.53 | 5.71 | 24.70 | 325 | 0.00 |
| 10 | 11.24 | 33.55 | 4.52 | 237 | 10 | 11.24 | 33.55 | 4.52 | 25.62 | 237 | 0.03 |
| 20 | 9.90 | 33.69 | 2.96 | 205 | 20 | 9.90 | 33.69 | 2.96 | 25.97 | 205 | 0.05 |
| 29 | 9.60 | 33.95 | 2.01 | 181 | | | | | | | |
| YELLOWFIN; June 10, 1952; 0052 GCT; 32°12.5'N, 117°18.5'W; sounding, 710 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 34°. | | | | | | | | | | | 97.32 |
| 0 | 16.70 | 33.24 | 6.18 | 368 | 0 | 16.70 | 33.24 | 6.18 | 24.26 | 368 | 0.00 |
| 8 | 16.60 | 33.28 | 6.27 | 362 | 10 | 16.60 | 33.28 | 6.27 | 24.31 | 362 | 0.04 |
| 21 | 13.94 | 33.24 | 6.15 | 310 | 20 | 14.50 | 33.24 | 6.20 | 24.74 | 321 | 0.07 |
| 41 | 10.08 | 33.35 | 4.27 | 233 | 30 | 11.78 | 33.26 | 5.70 | 25.30 | 268 | 0.10 |
| 62 | 10.02 | 33.60 | 3.46 | 213 | 50 | 10.05 | 33.45 | 3.63 | 25.75 | 225 | 0.15 |
| 81 | 9.62 | 33.75 | 3.39 | 196 | 75 | 9.89 | 33.73 | 3.40 | 26.00 | 202 | 0.20 |
| 123 | 9.40 | 33.87 | 2.93 | 184 | 100 | 9.49 | 33.80 | 3.17 | 26.12 | 190 | 0.25 |
| 160 | 9.12 | 34.09 | 2.64 | 163 | 150 | 9.21 | 34.03 | 2.73 | 26.35 | 169 | 0.34 |
| 198 | 8.73 | 34.05 | 1.94 | 160 | 200 | (8.71) | (34.05) | (1.93) | (26.44) | (160) | (0.43) |
| YELLOWFIN; June 9, 1952; 2043 GCT; 31°57'N, 117°48'W; sounding, 660 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 04°. | | | | | | | | | | | 97.40 |
| 0 | 16.42 | 33.24 | 5.88 | 361 | 0 | 16.42 | 33.24 | 5.88 | 24.32 | 361 | 0.00 |
| 10 | 15.47 | 33.24 | 6.02 | 341 | 10 | 15.47 | 33.24 | 6.02 | 24.53 | 341 | 0.04 |
| 25 | 13.24 | 33.24 | 6.38 | 296 | 20 | 14.08 | 33.24 | 6.35 | 24.83 | 313 | 0.07 |
| 50 | 11.51 | 33.42 | - | 252 | 30 | 12.90 | 33.25 | | 25.08 | 289 | 0.10 |
| 75 | 10.20 | 33.31 | 4.65 | 238 | 50 | 11.51 | 33.42 | | 25.47 | 252 | 0.15 |
| 100 | 9.53 | 33.57 | 3.93 | 208 | 75 | 10.20 | 33.31 | 4.65 | 25.62 | 238 | 0.21 |
| 154 | 8.64 | 33.93 | 2.99 | 168 | 100 | 9.53 | 33.57 | 3.93 | 25.93 | 208 | 0.27 |
| 203 | 8.36 | 34.09 | 2.16 | 152 | 150 | 8.68 | 33.91 | 3.06 | 26.34 | 170 | 0.37 |
| 252 | 7.74 | 34.07 | 1.43 | 144 | 200 | 8.39 | 34.09 | 2.21 | 26.52 | 152 | 0.45 |
| 301 | 7.54 | 34.14 | 1.00 | 136 | 250 | 7.77 | 34.07 | 1.47 | 26.60 | 145 | 0.52 |
| 405 | 6.60 | 34.20 | 0.62 | 120 | 300 | 7.57 | 34.14 | 1.02 | 26.68 | 137 | 0.60 |
| 504 | 6.12 | 34.18 | 0.46 | 115 | 400 | 6.64 | 34.20 | 0.63 | 26.86 | 120 | 0.73 |
| 608 | 5.44 | 34.23 | 0.47 | 103 | 500 | 6.16 | 34.18 | 0.47 | 26.91 | 116 | 0.85 |
| | | | | | 600 | 5.50 | 34.22 | 0.46 | 27.02 | 105 | 0.97 |
| YELLOWFIN; June 9, 1952; 1526 GCT; 31°35.5'N, 118°30.5'W; sounding, 1300 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | | 97.50 |
| 0 | 16.00 | 33.31 | 5.78 | 347 | 0 | 16.00 | 33.31 | 5.78 | 24.47 | 347 | 0.00 |
| 10 | 14.52 | 33.24 | 6.06 | 321 | 10 | 14.52 | 33.24 | 6.06 | 24.74 | 321 | 0.03 |
| 25 | 13.16 | 33.30 | 6.16 | 290 | 20 | 13.40 | 33.26 | 6.15 | 24.99 | 298 | 0.06 |
| 49 | 12.31 | 33.42 | 5.92 | 266 | 30 | 12.93 | 33.35 | 6.15 | 25.15 | 282 | 0.09 |
| 74 | 10.35 | 33.30 | 4.73 | 241 | 50 | 12.31 | 33.42 | 5.89 | 25.32 | 266 | 0.15 |
| 98 | 9.82 | 33.49 | 3.92 | 218 | 75 | 10.34 | 33.30 | 4.73 | 25.59 | 241 | 0.21 |
| 151 | 8.84 | 33.87 | 3.04 | 175 | 100 | 9.81 | 33.51 | 3.89 | 25.84 | 217 | 0.27 |
| 199 | 8.25 | 34.00 | 2.54 | 157 | 150 | 8.85 | 33.87 | 3.05 | 26.28 | 175 | 0.37 |
| 247 | 7.76 | 34.16 | 1.66 | 138 | 200 | 8.25 | 34.00 | 2.49 | 26.47 | 157 | 0.45 |
| 295 | 7.41 | 34.16 | 1.36 | 133 | 250 | 7.74 | 34.16 | 1.63 | 26.67 | 138 | 0.53 |
| 397 | 6.74 | 34.22 | 0.67 | 120 | 300 | 7.39 | 34.16 | 1.34 | 26.72 | 133 | 0.60 |
| 495 | 6.16 | - | 0.44 | | 400 | 6.71 | 34.22 | 0.65 | 26.87 | 119 | 0.73 |
| 599 | 5.46 | 34.36 | 0.34 | 94 | 500 | 6.13 | 34.30 | 0.42 | 27.00 | 106 | 0.85 |
| | | | | | 600 | (5.44) | (34.36) | (0.34) | (27.14) | (94) | (0.96) |

a) Station reoccupied at end of regular cruise pattern to obtain salinity samples.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 9760 | YELLOWFIN; June 9, 1952; 0836, 0917 GCT; 31°15.5'N, 119°10.5'W; sounding, 2000 fm; wind, 260°, force 1; weather, clear; sea, moderate; wire angle, 04°, 03°. | | | | | | | | | | |
| 0 | 16.32 | 33.25a) | 5.72 | 359 | 0 | 16.32 | 33.25 | 5.72 | 24.35 | 359 | 0.00 |
| 10 | 15.88 | 33.21 | 5.74 | 352 | 10 | 15.88 | 33.21 | 5.74 | 24.42 | 352 | 0.04 |
| 25 | 14.66 | 33.21 | 5.94 | 326 | 20 | 14.80 | 33.21 | 5.81 | 24.66 | 329 | 0.07 |
| 50 | 13.50 | 33.22 | 5.99 | 303 | 30 | 14.40 | 33.21 | 5.97 | 24.74 | 321 | 0.10 |
| 75 | 11.72 | 33.21 | 5.37 | 271 | 50 | 13.50 | 33.22 | 5.99 | 24.94 | 303 | 0.16 |
| 99 | 10.87 | 33.26 | 4.84 | 252 | 75 | 11.72 | 33.21 | 5.37 | 25.27 | 271 | 0.24 |
| 153 | 8.98 | 33.68 | 3.72 | 191 | 100 | 10.87 | 33.26 | 4.81 | 25.47 | 252 | 0.30 |
| 201 | 8.62 | 34.00 | 2.48 | 162 | 150 | 9.02 | 33.65 | 3.79 | 26.08 | 194 | 0.42 |
| | | | | | 200 | 8.62 | 33.99 | 2.51 | 26.41 | 163 | 0.51 |
| 297 | 7.84 | 34.20 | 1.26 | 136 | 250 | 8.15 | 34.12 | 1.92 | 26.58 | 146 | 0.59 |
| 399 | 6.92 | 34.31 | 0.64 | 115 | 300 | 7.83 | 34.21 | 1.23 | 26.70 | 135 | 0.66 |
| 497 | 6.28 | 34.31 | 0.44 | 107 | 400 | 6.92 | 34.31 | 0.63 | 26.91 | 115 | 0.79 |
| 602 | 5.67 | 34.31 | 0.29 | 100 | 500 | 6.27 | 34.31 | 0.44 | 26.99 | 107 | 0.91 |
| | | | | | 600 | 5.68 | 34.31 | 0.30 | 27.07 | 100 | 1.02 |
| 9770 | YELLOWFIN; June 9, 1952; 0301 GCT; 30°53'N, 119°50.5'W; sounding, 2000 fm; wind, 230°, force 1; weather, cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 16.52 | 33.17 | 5.44 | 369 | 0 | 16.52 | 33.17 | 5.44 | 24.24 | 369 | 0.00 |
| 10 | 15.13 | 33.17 | 5.87 | 339 | 10 | 15.13 | 33.17 | 5.87 | 24.55 | 339 | 0.04 |
| 25 | 14.77 | 33.13 | 5.67 | 335 | 20 | 14.88 | 33.13 | 5.67 | 24.58 | 337 | 0.07 |
| 49 | 14.01 | 33.17 | 6.23 | 316 | 30 | 14.66 | 33.13 | 5.67 | 24.63 | 332 | 0.10 |
| 74 | 12.13 | 33.10 | 5.97 | 286 | 50 | 13.99 | 33.17 | 6.22 | 24.80 | 316 | 0.17 |
| 98 | 10.14 | 33.06 | 5.24 | 255 | 75 | 12.11 | 33.10 | 5.97 | 25.11 | 286 | 0.24 |
| 152 | 8.92 | 33.64 | 3.91 | 193 | 100 | 10.05 | 33.06 | 5.21 | 25.45 | 254 | 0.31 |
| 200 | 8.16 | 33.91 | 3.64 | 162 | 150 | 8.98 | 33.62 | 3.93 | 26.06 | 196 | 0.42 |
| 248 | 7.82 | 33.98 | 2.71 | 152 | 200 | 8.16 | 33.91 | 3.64 | 26.42 | 162 | 0.52 |
| 296 | 7.27 | 34.02 | 2.61 | 142 | 250 | 7.78 | 33.98 | 2.71 | 26.53 | 152 | 0.60 |
| 397 | 6.73 | 34.13 | 1.30 | 126 | 300 | 7.25 | 34.02 | 2.59 | 26.63 | 141 | 0.67 |
| 495 | 6.02 | 34.22 | 0.52 | 111 | 400 | 6.72 | 34.13 | 1.26 | 26.79 | 126 | 0.81 |
| 597 | 5.61 | 34.33 | 0.40 | 98 | 500 | 6.00 | 34.22 | 0.50 | 26.96 | 111 | 0.94 |
| | | | | | 600 | (5.60) | (34.34) | (0.40) | (27.10) | (97) | (1.05) |
| 9780 | YELLOWFIN; June 8, 1952; 2202 GCT; 30°35'N, 120°31'W; sounding, 2000 fm; wind, 230°, force 2; weather, cloudy; sea, rough; wire angle, 07°. | | | | | | | | | | |
| 0 | 17.15 | 33.28 | 5.70 | 375 | 0 | 17.15 | 33.28 | 5.70 | 24.18 | 375 | 0.00 |
| 10 | 16.31 | 33.24 | 5.73 | 359 | 10 | 16.31 | 33.24 | 5.73 | 24.35 | 359 | 0.04 |
| 25 | 15.80 | 33.28 | 5.74 | 345 | 20 | 15.95 | 33.26 | 5.73 | 24.44 | 350 | 0.07 |
| 50 | 15.24 | 33.34 | 5.87 | 329 | 30 | 15.68 | 33.29 | 5.75 | 24.53 | 342 | 0.11 |
| 74 | 13.99 | 33.17 | 5.99 | 316 | 50 | 15.24 | 33.34 | 5.87 | 24.66 | 329 | 0.17 |
| 99 | 13.60 | 33.24 | 5.93 | 303 | 75 | 13.98 | 33.17 | 5.99 | 24.80 | 316 | 0.26 |
| 153 | 10.25 | 33.31 | 4.87 | 238 | 100 | 13.55 | 33.24 | 5.91 | 24.94 | 302 | 0.33 |
| 203 | 8.74 | 33.73 | 3.81 | 184 | 150 | 10.39 | 33.31 | 4.97 | 25.59 | 241 | 0.47 |
| 252 | 8.15 | 33.91 | 3.19 | 162 | 200 | 8.82 | 33.68 | 3.90 | 26.13 | 189 | 0.58 |
| 301 | 7.40 | 34.04 | 2.39 | 142 | 250 | 8.19 | 33.90 | 3.21 | 26.40 | 163 | 0.67 |
| 404 | 6.80 | 34.16 | 1.01 | 125 | 300 | 7.40 | 34.04 | 2.40 | 26.63 | 142 | 0.75 |
| 504 | 6.02 | 34.25 | 0.58 | 109 | 400 | 6.82 | 34.15 | 1.04 | 26.80 | 126 | 0.89 |
| 609 | 5.54 | 34.33 | 0.34 | 97 | 500 | 6.04 | 34.24 | 0.60 | 26.97 | 110 | 1.01 |
| | | | | | 600 | 5.57 | 34.32 | 0.36 | 27.09 | 98 | 1.12 |

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in correct order.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| YELLOWFIN; June 8, 1952; 1714 GCT; 30°11'N, 120°55'W; sounding, 2200 fm; wind, 270°, force 4; weather, partly cloudy; sea, rough; wire angle, 07°. | | | | | | | | | | | 97.90 |
| 0 | 17.13 | 33.53 | 5.48 | 356 | 0 | 17.13 | 33.53 | 5.48 | 24.38 | 356 | 0.00 |
| 10 | 17.05 | 33.53 | 5.56 | 354 | 10 | 17.05 | 33.53 | 5.56 | 24.40 | 354 | 0.04 |
| 25 | 16.81 | 33.53 | 5.65 | 349 | 20 | 16.87 | 33.53 | 5.62 | 24.44 | 350 | 0.07 |
| 50 | 15.90 | 33.44 | 5.69 | 336 | 30 | 16.79 | 33.53 | 5.66 | 24.46 | 348 | 0.11 |
| 74 | 14.69 | 33.31 | 5.79 | 320 | 50 | 15.90 | 33.44 | 5.69 | 24.59 | 336 | 0.17 |
| 99 | 12.57 | 33.31 | 5.33 | 279 | 75 | 14.68 | 33.31 | 5.78 | 24.76 | 320 | 0.26 |
| 153 | 9.62 | 33.58 | 4.12 | 208 | 100 | 12.50 | 33.31 | 5.30 | 25.20 | 277 | 0.33 |
| 203 | 8.76 | 33.91 | 3.07 | 171 | 150 | 9.76 | 33.57 | 4.19 | 25.90 | 211 | 0.46 |
| 252 | 8.21 | 34.07 | 2.44 | 151 | 200 | 8.80 | 33.90 | 3.11 | 26.31 | 172 | 0.55 |
| 302 | 7.64 | 34.13 | 1.78 | 138 | 250 | 8.23 | 34.06 | 2.48 | 26.52 | 152 | 0.64 |
| 405 | 6.64 | 34.20 | 0.88 | 120 | 300 | 7.67 | 34.13 | 1.81 | 26.66 | 139 | 0.71 |
| 504 | 6.06 | 34.20 | 0.54 | 113 | 400 | 6.68 | 34.20 | 0.92 | 26.85 | 121 | 0.85 |
| 609 | 5.48 | 34.33 | 0.42 | 96 | 500 | 6.08 | 34.20 | 0.55 | 26.93 | 113 | 0.97 |
| | | | | | 600 | 5.52 | 34.32 | 0.43 | 27.10 | 98 | 1.08 |
| YELLOWFIN; June 10, 1952; 0801 GCT; 31°42'N, 116°43.5'W; sounding, 105 fm; wind, 310°, force 1; weather, clear; sea, slight; wire angle, 02°. | | | | | | | | | | | 100.29 |
| 0 | 11.40 | 33.68 | 4.32 | 230 | 0 | 11.40 | 33.68 | 4.32 | 25.70 | 230 | 0.00 |
| 10 | 10.36 | 33.73 | 2.67 | 209 | 10 | 10.36 | 33.73 | 2.67 | 25.92 | 209 | 0.02 |
| 20 | 10.14 | 33.80 | 2.31 | 200 | 20 | 10.14 | 33.80 | 2.31 | 26.01 | 200 | 0.04 |
| 30 | 10.01 | 33.84 | 2.34 | 195 | 30 | 10.01 | 33.84 | 2.34 | 26.07 | 195 | 0.06 |
| 50 | 9.92 | 33.86 | 2.24 | 192 | 50 | 9.92 | 33.86 | 2.24 | 26.10 | 192 | 0.10 |
| 75 | 9.81 | 33.89 | 2.20 | 188 | 75 | 9.81 | 33.89 | 2.20 | 26.14 | 188 | 0.15 |
| YELLOWFIN; June 10, 1952; 0910 GCT; 31°40.5'N, 116°46.5'W; sounding, 180 fm; wind, 310°, force 4; weather, clear; sea, missing; wire angle, 17°. | | | | | | | | | | | 100.30 |
| 0 | 12.72 | 33.53 | 5.46 | 265 | 0 | 12.72 | 33.53 | 5.46 | 25.33 | 265 | 0.00 |
| 9 | 12.22 | 33.57 | 5.18 | 253 | 10 | 12.20 | 33.60 | 4.91 | 25.48 | 251 | 0.03 |
| 24 | 10.37 | 33.75 | 2.74 | 208 | 20 | 10.50 | 33.74 | 3.15 | 25.90 | 211 | 0.05 |
| 47 | 10.16 | 33.79 | 2.35 | 201 | 30 | 10.29 | 33.76 | 2.51 | 25.96 | 206 | 0.07 |
| 71 | 9.94 | 33.83 | 2.23 | 195 | 50 | 10.13 | 33.80 | 2.34 | 26.01 | 200 | 0.11 |
| 94 | 9.72 | 33.95 | 2.23 | 183 | 75 | 9.91 | 33.84 | 2.23 | 26.08 | 194 | 0.16 |
| 146 | 9.22 | 34.15 | 1.68 | 160 | 100 | 9.66 | 33.99 | 2.22 | 26.24 | 179 | 0.21 |
| 193 | 8.99 | 34.22 | 1.24 | 151 | 150 | 9.20 | 34.16 | 1.62 | 26.45 | 159 | 0.29 |
| 242 | 8.56 | 34.27 | 1.00 | 141 | 200 | 8.93 | 34.23 | 1.20 | 26.55 | 150 | 0.37 |
| | | | | | 250 | (8.50) | (34.28) | (0.98) | (26.65) | (140) | (0.45) |
| YELLOWFIN; June 10, 1952; 1443 GCT; 31°21'N, 117°27'W; sounding, 1100 fm; wind, 310°, force 5; weather, cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | | 100.40 |
| 0 | 16.72 | 33.39 | 5.64 | 357 | 0 | 16.72 | 33.39 | 5.64 | 24.37 | 357 | 0.00 |
| 10 | 16.73 | 33.40 | 5.79 | 357 | 10 | 16.73 | 33.40 | 5.79 | 24.37 | 357 | 0.04 |
| 25 | 14.76 | 33.33 | 5.99 | 320 | 20 | 16.69 | 33.38 | 5.94 | 24.37 | 357 | 0.07 |
| 50 | 10.63 | 33.37 | 5.07 | 240 | 30 | 13.00 | 33.33 | 5.95 | 25.12 | 285 | 0.10 |
| 75 | 10.05 | 33.55 | 3.89 | 217 | 50 | 10.63 | 33.37 | 5.07 | 25.59 | 240 | 0.16 |
| 100 | 9.70 | 33.73 | 3.41 | 199 | 75 | 10.05 | 33.55 | 3.89 | 25.83 | 217 | 0.21 |
| 154 | 8.82 | 34.01 | 2.77 | 164 | 100 | 9.70 | 33.73 | 3.41 | 26.03 | 199 | 0.27 |
| 203 | 8.48 | 34.20 | 1.78 | 145 | 150 | 8.91 | 33.99 | 2.82 | 26.36 | 167 | 0.36 |
| 252 | 8.24 | 34.26 | 1.23 | 137 | 200 | 8.44 | 34.19 | 1.85 | 26.59 | 145 | 0.44 |
| | | | | | 250 | 8.28 | 34.26 | 1.26 | 26.67 | 138 | 0.51 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 100.50 | YELLOWFIN; June 10, 1952; 1957, 2037 GCT; 31°01'N, 118°07'W; sounding, 1900 fm; wind, 300°, force 4; weather, cloudy; sea, moderate; wire angle, 22°, 24°. | | | | | | | | | | |
| 0 | 16.41 | 33.37 | 5.70 | 352 | 0 | 16.41 | 33.37 | 5.70 | 24.42 | 352 | 0.00 |
| 9 | 16.38 | 33.33 | 5.60 | 354 | 10 | 16.39 | 33.33 | 5.60 | 24.40 | 354 | 0.04 |
| 23 | 15.51 | 33.31 | 5.69 | 337 | 20 | 16.08 | 33.31 | 5.68 | 24.45 | 349 | 0.07 |
| 51 | 12.17 | 33.30 | 5.86 | 272 | 30 | 15.00 | 33.30 | 5.74 | 24.68 | 327 | 0.10 |
| 74 | 10.91 | 33.31 | 4.64 | 249 | 50 | 12.15 | 33.30 | 5.85 | 25.26 | 272 | 0.16 |
| 101 | 9.78 | 33.62 | 3.69 | 208 | 75 | 10.89 | 33.31 | 4.60 | 25.50 | 249 | 0.23 |
| 151 | 8.84 | 33.93 | 2.80 | 171 | 100 | 9.80 | 33.54 | 3.73 | 25.87 | 214 | 0.29 |
| | | | | | 150 | 8.89 | 33.93 | 2.82 | 26.32 | 171 | 0.39 |
| 199 | 8.44 | 34.14 | 2.07 | 149 | 200 | 8.44 | 34.14 | 2.05 | 26.55 | 149 | 0.47 |
| 254 | 7.88 | 34.18 | 1.57 | 138 | 250 | 7.90 | 34.18 | 1.61 | 26.67 | 138 | 0.54 |
| 300 | 7.77 | 34.29 | 0.88 | 128 | 300 | 7.77 | 34.29 | 0.88 | 26.77 | 128 | 0.61 |
| 406 | 6.69 | 34.33 | 0.56 | 111 | 400 | 6.72 | 34.33 | 0.58 | 26.95 | 111 | 0.74 |
| 509 | 5.98 | 34.33 | 0.36 | 102 | 500 | 6.03 | 34.33 | 0.38 | 27.04 | 103 | 0.85 |
| 615 | 5.30 | 34.38 | 0.35 | 91 | 600 | 5.40 | 34.37 | 0.35 | 27.15 | 92 | 0.95 |
| 100.60 | YELLOWFIN; June 11, 1952; 0155 GCT; 30°41'N, 118°47.5'W; sounding, 2000 fm; wind, 290°, force 3; weather, cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | 17.04 | 33.33 | 5.57 | 369 | 0 | 17.04 | 33.33 | 5.57 | 24.25 | 369 | 0.00 |
| 10 | 17.04 | 33.31 | 5.53 | 370 | 10 | 17.04 | 33.31 | 5.53 | 24.23 | 370 | 0.04 |
| 25 | 15.96 | 33.31 | 5.72 | 346 | 20 | 16.81 | 33.31 | 5.59 | 24.28 | 365 | 0.07 |
| 49 | 13.34 | 33.26 | 6.07 | 297 | 30 | 15.17 | 33.30 | 5.80 | 24.65 | 330 | 0.11 |
| 73 | 11.26 | 33.31 | 4.91 | 255 | 50 | 13.26 | 33.26 | 6.07 | 25.01 | 295 | 0.17 |
| 98 | 10.30 | 33.53 | 3.93 | 223 | 75 | 11.20 | 33.32 | 4.89 | 25.45 | 254 | 0.24 |
| 152 | 9.23 | 33.82 | 3.12 | 185 | 100 | 10.25 | 33.54 | 3.87 | 25.79 | 221 | 0.30 |
| 200 | 8.63 | 34.02 | 2.54 | 161 | 150 | 9.26 | 33.81 | 3.17 | 26.17 | 186 | 0.40 |
| 248 | 8.04 | 34.09 | 1.97 | 147 | 200 | 8.63 | 34.02 | 2.54 | 26.43 | 161 | 0.49 |
| 297 | 7.76 | 34.23 | 1.29 | 133 | 250 | 8.03 | 34.09 | 1.93 | 26.58 | 147 | 0.57 |
| 399 | 6.84 | 34.23 | 0.73 | 120 | 300 | 7.73 | 34.23 | 1.26 | 26.73 | 132 | 0.64 |
| 496 | 6.20 | 34.23 | 0.44 | 112 | 400 | 6.83 | 34.23 | 0.73 | 26.86 | 120 | 0.77 |
| 599 | 5.54 | 34.37 | 0.28 | 94 | 500 | 6.17 | 34.23 | 0.43 | 26.94 | 112 | 0.90 |
| 799 | 4.56 | 34.47 | 0.41 | 76 | 600 | 5.54 | 34.37 | 0.28 | 27.13 | 94 | 1.01 |
| 928 | 4.11 | 34.47 | 0.53 | 71 | 700 | 4.99 | 34.43 | 0.30 | 27.25 | 83 | 1.10 |
| | | | | | 800 | 4.55 | 34.47 | 0.42 | 27.33 | 76 | 1.19 |
| | | | | | 1000 | (3.94) | (34.47) | | (27.39) | (69) | (1.35) |
| 100.70 | YELLOWFIN; June 11, 1952; 0739 GCT; 30°19.5'N, 119°27'W; sounding, 2200 fm; wind, 310°, force 4; weather, cloudy; sea, missing; wire angle, 23°. | | | | | | | | | | |
| 0 | 16.34 | 33.21 | 5.67 | 362 | 0 | 16.34 | 33.21 | 5.67 | 24.32 | 362 | 0.00 |
| 9 | 16.34 | 33.21 | 5.64 | 362 | 10 | 16.34 | 33.21 | 5.65 | 24.32 | 362 | 0.04 |
| 28 | 15.14 | 33.15 | 5.88 | 341 | 20 | 16.04 | 33.17 | 5.70 | 24.35 | 358 | 0.07 |
| 55 | - | 33.15 | 5.97 | | 30 | 14.98 | 33.15 | 5.89 | 24.57 | 337 | 0.11 |
| 83 | 12.07 | 33.15 | 5.60 | 281 | 50 | 13.7 | 33.15 | 5.97 | 24.84 | 312 | 0.17 |
| 110 | 10.67 | 33.21 | 5.18 | 253 | 75 | 12.5 | 33.15 | 5.78 | 25.08 | 289 | 0.25 |
| 164 | 9.02 | 33.60 | 3.96 | 198 | 100 | 11.20 | 33.18 | 5.32 | 25.34 | 264 | 0.32 |
| 218 | 8.56 | 34.00 | 2.76 | 161 | 150 | 9.30 | 33.49 | 4.32 | 25.91 | 210 | 0.44 |
| | | | | | 200 | 8.69 | 33.91 | 3.11 | 26.33 | 170 | 0.53 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| YELLOWFIN; June 11, 1952; 1321, 1340 GCT; 29°58.5'N, 120°07'W; sounding, 2000 fm; wind, 310°, force 5; weather, overcast; sea, rough; wire angle, 15°, 17°. | | | | | | | | | | | 100.80 |
| 0 | 17.45 | 33.42 | 5.39 | 371 | 0 | 17.45 | 33.42 | 5.39 | 24.22 | 371 | 0.00 |
| 10 | 17.48 | 33.42 | 5.58 | 372 | 10 | 17.48 | 33.42 | 5.58 | 24.21 | 372 | 0.04 |
| 24 | 17.05 | 33.46 | 5.88 | 359 | 20 | 17.22 | 33.45 | 5.80 | 24.29 | 364 | 0.07 |
| 48 | 15.50 | 33.35 | 6.01 | 334 | 30 | 16.50 | 33.45 | 5.91 | 24.46 | 348 | 0.11 |
| 72 | 14.66 | 33.30 | 6.11 | 320 | 50 | 15.40 | 33.34 | 6.05 | 24.63 | 332 | 0.18 |
| 96 | 12.01 | 33.19 | 5.44 | 277 | 75 | 14.55 | 33.29 | 6.11 | 24.77 | 318 | 0.26 |
| | | | | | 100 | 11.79 | 33.19 | 5.32 | 25.24 | 273 | 0.33 |
| 149 | 9.96 | 33.53 | 4.53 | 217 | 150 | 9.93 | 33.53 | 4.49 | 25.84 | 217 | 0.46 |
| 195 | 9.18 | 33.89 | 3.62 | 179 | 200 | 9.08 | 33.91 | 3.52 | 26.27 | 176 | 0.56 |
| 242 | 8.32 | 34.04 | 2.69 | 155 | 250 | 8.22 | 34.06 | 2.57 | 26.52 | 152 | 0.64 |
| 289 | 7.83 | 34.14 | 1.83 | 140 | 300 | 7.72 | 34.15 | 1.68 | 26.67 | 138 | 0.72 |
| 389 | 6.98 | 34.20 | 1.01 | 124 | 400 | 6.89 | 34.20 | 0.96 | 26.83 | 123 | 0.85 |
| 482 | 6.41 | 34.25 | 0.58 | 113 | 500 | 6.31 | 34.26 | 0.49 | 26.95 | 111 | 0.98 |
| 582 | 5.74 | 34.31 | 0.33 | 101 | 600 | 5.62 | (34.32) | 0.33 | (27.08) | (99) | (1.09) |
| 779 | 4.63 | 34.23u | 0.39 | | 700 | 5.01 | | 0.33 | | | |
| 908 | 4.22 | 34.45 | 0.55 | 74 | 800 | 4.57 | | 0.40 | | | |
| YELLOWFIN; June 11, 1952; 1926 GCT; 29°36'N, 120°48'W; sounding, 2000 fm; wind, 320°, force 5; weather; overcast; sea, very rough; wire angle, 21°. | | | | | | | | | | | 100.90 |
| 0 | 17.25 | 33.40 | 5.40 | 368 | 0 | 17.25 | 33.40 | 5.40 | 24.25 | 368 | 0.00 |
| 9 | 17.26 | 33.46 | 5.45 | 364 | 10 | 17.26 | 33.46 | 5.45 | 24.29 | 364 | 0.04 |
| 23 | 16.67 | 33.35 | 5.55 | 359 | 20 | 17.10 | 33.44 | 5.51 | 24.32 | 362 | 0.07 |
| 52 | 15.67 | 33.35 | 5.74 | 337 | 30 | 16.34 | 33.35 | 5.59 | 24.42 | 352 | 0.11 |
| 75 | 14.18 | 33.21 | 5.84 | 317 | 50 | 15.73 | 33.35 | 5.73 | 24.56 | 338 | 0.18 |
| 104 | 12.13 | 33.17 | 5.58 | 281 | 75 | 14.18 | 33.21 | 5.84 | 24.79 | 317 | 0.26 |
| 155 | 9.44 | 33.44 | 4.28 | 216 | 100 | 12.49 | 33.17 | 5.65 | 25.10 | 287 | 0.34 |
| 207 | 8.58 | 33.98 | 3.31 | 163 | 150 | 9.60 | 33.40 | 4.40 | 25.79 | 221 | 0.46 |
| 264 | 7.85 | 33.95 | 2.89 | 155 | 200 | 8.68 | 33.98 | 3.40 | 26.39 | 164 | 0.56 |
| 311 | 7.30 | 34.05 | 1.96 | 140 | 250 | 8.02 | 33.95 | 2.98 | 26.47 | 157 | 0.65 |
| 421 | 6.38 | 34.14 | 0.86 | 121 | 300 | 7.42 | 34.02 | 2.17 | 26.61 | 144 | 0.72 |
| 526 | 5.96 | 34.24 | 0.54 | 109 | 400 | 6.50 | 34.12 | 1.02 | 26.81 | 124 | 0.86 |
| 633 | 5.22 | 34.38 | 0.36 | 90 | 500 | 6.09 | 34.21 | 0.61 | 26.94 | 112 | 0.99 |
| | | | | | 600 | 5.46 | 34.33 | 0.41 | 27.11 | 96 | 1.10 |
| YELLOWFIN; June 12, 1952; 0037 GCT; 29°20.5'N, 121°27'W; sounding, 2000 fm; wind, 310°, force 6; weather, overcast; sea, high; wire angle, 23°. | | | | | | | | | | | 100.100 |
| 0 | 17.15 | 33.44 | 5.51 | 363 | 0 | 17.15 | 33.44 | 5.51 | 24.30 | 363 | 0.00 |
| 9 | 17.18 | 33.40 | 5.42 | 367 | 10 | 17.19 | 33.40 | 5.42 | 24.26 | 367 | 0.04 |
| 28 | 17.19 | 33.40 | 5.50 | 367 | 20 | 17.20 | 33.40 | 5.44 | 24.26 | 367 | 0.07 |
| 55 | 15.27 | 33.26 | 5.61 | 335 | 30 | 17.18 | 33.40 | 5.51 | 24.27 | 367 | 0.11 |
| 84 | 15.02 | 33.33 | 6.30 | 325 | 50 | 15.40 | 33.26 | 5.59 | 24.56 | 338 | 0.18 |
| 110 | 13.72 | 33.36 | 5.48 | 297 | 75 | 15.11 | 33.31 | 6.24 | 24.67 | 328 | 0.26 |
| 165 | 9.75 | 33.53 | 4.24 | 214 | 100 | 14.70 | 33.35 | 6.09 | 24.79 | 317 | 0.35 |
| 218 | 8.72 | 33.87 | 2.65 | 173 | 150 | 10.30 | 33.48 | 4.52 | 25.74 | 227 | 0.48 |
| 273 | 7.88 | 33.96 | 1.93 | 154 | 200 | 9.06 | 33.80 | 3.12 | 26.19 | 183 | 0.59 |
| 327 | 7.25 | 34.04 | 1.85 | 140 | 250 | 8.21 | 33.92 | 2.10 | 26.42 | 162 | 0.68 |
| 432 | 6.16 | 34.16 | 0.90 | 117 | 300 | 7.53 | 34.00 | 1.88 | 26.58 | 147 | 0.76 |
| 544 | 5.61 | 34.27 | 0.59 | 102 | 400 | 6.42 | 34.13 | 1.20 | 26.83 | 123 | 0.89 |
| 652 | 5.14 | 34.33 | 0.63 | 92 | 500 | 5.82 | 34.23 | 0.65 | 26.99 | 108 | 1.02 |
| | | | | | 600 | 5.38 | 34.30 | 0.60 | 27.10 | 97 | 1.13 |
| YELLOWFIN; June 13, 1952; 1632 GCT; 31°05'N, 116°25'W; sounding, 35 fm; wind, 300°, force 4; weather, clear; sea, missing; wire angle, 02°. | | | | | | | | | | | 103.30 |
| 0 | 11.48 | 33.68 | 4.74 | 232 | 0 | 11.48 | 33.68 | 4.74 | 25.68 | 232 | 0.00 |
| 10 | 11.40 | 33.68 | 4.74 | 230 | 10 | 11.40 | 33.68 | 4.74 | 25.70 | 230 | 0.02 |
| 20 | 10.96 | 33.64 | 4.11 | 226 | 20 | 10.96 | 33.64 | 4.11 | 25.74 | 226 | 0.05 |
| 30 | 9.98 | 33.75 | 3.07 | 202 | 30 | 9.98 | 33.75 | 3.07 | 26.00 | 202 | 0.07 |
| 50 | 9.69 | 33.89 | 2.84 | 187 | 50 | 9.69 | 33.89 | 2.84 | 26.16 | 187 | 0.11 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **103.35** | YELLOWFIN; June 13, 1952; 1349 GCT; 30°55.5'N, 116°45'W; sounding, 840 fm; wind, 320°, force 6; weather, partly cloudy; sea, missing; wire angle, 12°. | | | | | | | | | | |
| 0 | 12.61 | 33.35 | 5.81 | 276 | 0 | 12.61 | 33.35 | 5.81 | 25.21 | 276 | 0.00 |
| 10 | 12.33 | 33.36 | 5.72 | 271 | 10 | 12.33 | 33.36 | 5.72 | 25.27 | 271 | 0.03 |
| 30 | 11.09 | 33.46 | 4.64 | 241 | 20 | 11.81 | 33.40 | 5.48 | 25.40 | 258 | 0.05 |
| 59 | 10.01 | 33.53 | 3.84 | 218 | 30 | 11.09 | 33.46 | 4.64 | 25.58 | 241 | 0.08 |
| 88 | 9.84 | 33.82 | 2.93 | 194 | 50 | 10.11 | 33.51 | 4.08 | 25.79 | 221 | 0.13 |
| 117 | 9.46 | 34.00 | 2.57 | 175 | 75 | 9.91 | 33.63 | 3.25 | 25.92 | 209 | 0.18 |
| 174 | 8.90 | 34.16 | 1.76 | 154 | 100 | 9.69 | 33.94 | 2.75 | 26.20 | 183 | 0.23 |
| 232 | 8.34 | 34.23 | 1.33 | 141 | 150 | 9.12 | 34.10 | 2.10 | 26.42 | 162 | 0.32 |
| 289 | 8.07 | 34.34 | 0.89 | 129 | 200 | 8.65 | 34.20 | 1.56 | 26.57 | 148 | 0.40 |
| 347 | 7.39 | 34.31 | 0.73 | 122 | 250 | 8.24 | 34.26 | 1.19 | 26.68 | 137 | 0.47 |
| 457 | 6.66 | 34.33 | 0.41 | 111 | 300 | 7.98 | 34.34 | 0.83 | 26.78 | 128 | 0.54 |
| 574 | 6.00 | 34.38 | 0.32 | 99 | 400 | 7.01 | 34.32 | 0.58 | 26.90 | 116 | 0.66 |
| 688 | 5.45 | 34.42 | 0.30 | 89 | 500 | 6.41 | 34.35 | 0.38 | 27.01 | 106 | 0.78 |
| | | | | | 600 | 5.88 | 34.39 | 0.32 | 27.11 | 96 | 0.89 |
| | | | | | 700 | (5.39) | (34.42) | | (27.19) | (89) | (0.99) |
| **103.60** | YELLOWFIN; June 13, 1952; 0106 GCT; 30°06'N, 118°25.5'W; sounding, 1600 fm; wind, 310°, force 7; weather, clear; sea, high; wire angle, 44°. | | | | | | | | | | |
| 130 | 9.74 | - | 3.41 | | | | | | | | |
| 175 | 9.20 | 33.71 | 2.50 | 192 | | | | | | | |
| 221 | 8.97 | 34.00 | 1.91 | 167 | | | | | | | |
| 267 | 8.69 | 34.20 | 1.27 | 148 | | | | | | | |
| 361 | 7.15 | 34.23 | 0.94 | 124 | | | | | | | |
| 462 | 6.60 | 34.33 | 0.52 | 110 | | | | | | | |
| 568 | 5.86 | 34.34 | 0.32 | 100 | | | | | | | |
| | | | | | 150 | 9.47 | | 2.98 | | | |
| | | | | | 200 | 9.06 | 33.88 | 2.18 | 26.25 | 178 | 0.00a) |
| | | | | | 250 | 8.81 | 34.15 | 1.49 | 26.50 | 154 | 0.09a) |
| | | | | | 300 | 8.40 | 34.22 | 1.10 | 26.62 | 143 | 0.16a) |
| | | | | | 400 | 6.92 | 34.26 | 0.80 | 26.87 | 119 | 0.30a) |
| | | | | | 500 | 6.39 | 34.34 | 0.42 | 27.00 | 106 | 0.42a) |
| **103.70** | YELLOWFIN; June 12, 1952; 1919 GCT; 29°48.5'N, 119°04'W; sounding, 2200 fm; wind, 310°, force 7; weather, clear; sea, high; wire angle, 33°. | | | | | | | | | | |
| 0 | 17.18 | 33.51 | 5.51 | 359 | 0 | 17.18 | 33.51 | 5.51 | 24.35 | 359 | 0.00 |
| 8 | 17.19 | 33.48 | 5.45 | 361 | 10 | 17.20 | 33.48 | 5.45 | 24.32 | 361 | 0.04 |
| 22 | 17.18 | 33.46 | 5.48 | 362 | 20 | 17.19 | 33.46 | 5.47 | 24.31 | 362 | 0.07 |
| 47 | 16.86 | 33.53 | 5.58 | 350 | 30 | 17.13 | 33.47 | 5.51 | 24.33 | 360 | 0.11 |
| 67 | 15.52 | 33.44 | 5.72 | 327 | 50 | 16.69 | 33.53 | 5.60 | 24.48 | 346 | 0.18 |
| 90 | 13.92 | 33.29 | 5.79 | 306 | 75 | 15.00 | 33.32 | 5.78 | 24.70 | 325 | 0.26 |
| 132 | 11.02 | 33.49 | 4.29 | 238 | 100 | 13.11 | 33.30 | 5.72 | 25.08 | 289 | 0.34 |
| 176 | 9.42 | 33.82 | 3.43 | 188 | 150 | 10.29 | 33.62 | 3.89 | 25.85 | 216 | 0.47 |
| 223 | 8.80 | 34.01 | 2.89 | 164 | 200 | 9.08 | 33.93 | 3.13 | 26.29 | 174 | 0.57 |
| 262 | 8.25 | 34.11 | 2.42 | 149 | 250 | 8.44 | 34.09 | 2.58 | 26.51 | 153 | 0.65 |
| 355 | 7.15 | 34.11 | 1.17 | 133 | 300 | 7.79 | 34.12 | 1.91 | 26.63 | 141 | 0.73 |
| 449 | 6.47 | 34.22 | 0.67 | 116 | 400 | 6.80 | 34.15 | 0.90 | 26.80 | 126 | 0.87 |
| 547 | 5.70 | 34.31 | 0.34 | 100 | 500 | 6.08 | 34.27 | 0.48 | 26.99 | 108 | 0.99 |

a) This value is calculated with respect to the 200-decibar surface rather than the sea surface.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| YELLOWFIN; June 12, 1952; 1220 GCT; 29°25'N, 119°52'W; sounding, 2200 fm; wind, 300°, force 7; weather, cloudy; sea, missing; wire angle, 15°. | | | | | | | | | | | 103.80 |
| 0 | 17.24 | 33.44 | 5.77 | 365 | 0 | 17.24 | 33.44 | 5.77 | 24.28 | 365 | 0.00 |
| 10 | 17.27 | 33.43 | 5.58 | 366 | 10 | 17.27 | 33.43 | 5.58 | 24.27 | 366 | 0.04 |
| 29 | 16.83 | 33.44 | 5.47 | 356 | 20 | 17.28 | 33.43 | 5.49 | 24.26 | 367 | 0.07 |
| 58 | 14.24u | 33.30 | 6.12 | | 30 | 16.82 | 33.44 | 5.48 | 24.38 | 356 | 0.11 |
| 87 | 14.18 | 33.24 | 6.12 | 315 | 50 | 15.70 | 33.35 | 6.00 | 24.57 | 338 | 0.18 |
| 115 | 11.81 | 33.22 | 5.63 | 272 | 75 | 14.35 | 33.24 | 6.13 | 24.78 | 318 | 0.26 |
| 171 | 9.33 | 33.60 | 4.21 | 202 | 100 | 13.93 | 33.22 | 5.96 | 24.85 | 311 | 0.34 |
| 228 | 8.56 | 33.98 | 3.21 | 163 | 150 | 10.08 | 33.34 | 4.71 | 25.66 | 233 | 0.48 |
| 285 | 7.70 | 34.07 | 2.10 | 144 | 200 | 8.91 | 33.86 | 3.69 | 26.26 | 177 | 0.58 |
| 342 | 7.14 | 34.16 | 1.58 | 130 | 250 | 8.24 | 34.02 | 2.75 | 26.49 | 155 | 0.67 |
| 454 | 6.20 | 34.25 | 1.73 | 111 | 300 | 7.52 | 34.09 | 1.95 | 26.65 | 140 | 0.74 |
| 571 | 5.66 | 34.29 | 0.24 | 101 | 400 | 6.63 | 34.21 | 1.17 | 26.87 | 119 | 0.88 |
| 684 | 5.12 | 34.38 | 0.60 | 88 | 500 | 5.98 | 34.27 | 0.56 | 27.00 | 107 | 1.00 |
| | | | | | 600 | 5.53 | 34.31 | 0.26 | 27.09 | 98 | 1.11 |
| | | | | | 700 | (5.08) | (34.39) | | (27.20) | (87) | (1.21) |
| YELLOWFIN; June 12, 1952; 0700 GCT; 29°06'N, 120°25'W; sounding, 2000 fm; wind, 350°, force 7; weather, partly cloudy; sea, missing; wire angle, 20°. | | | | | | | | | | | 103.90 |
| 0 | 17.39 | | 5.53 | | 0 | 17.39 | | 5.53 | | | |
| 9 | 17.42 | | 5.50 | | 10 | 17.42 | | 5.50 | | | |
| 28 | 17.33 | | 5.58 | | 20 | 17.39 | | 5.52 | | | |
| 56 | 15.42 | | 5.81 | | 30 | 17.33 | | 5.60 | | | |
| 84 | 15.02 | | 5.75 | | 50 | 15.72 | | 5.80 | | | |
| 112 | 14.12 | | 5.74 | | 75 | 15.15 | | 5.78 | | | |
| 166 | 10.48 | | 4.41 | | 100 | 14.68 | | 5.74 | | | |
| 221 | 8.82 | | 3.29 | | 150 | 11.20 | | 4.91 | | | |
| 275 | 8.00 | | 2.66 | | 200 | 9.40 | | 3.70 | | | |
| 331 | 7.26 | | 2.00 | | 250 | 8.36 | | 2.92 | | | |
| 437 | 6.86 | | 0.58 | | 300 | 7.60 | | 2.38 | | | |
| 550 | 5.95 | | 0.45 | | 400 | 6.97 | | 0.87 | | | |
| 661 | 5.14 | | 0.37 | | 500 | 6.39 | | 0.48 | | | |
| | | | | | 600 | 5.58 | | 0.42 | | | |
| CREST; June 21, 1952; 2027 GCT; 30°25.5'N, 116°10.5'W; sounding, 200 fm; wind, 330°, force 1; weather, overcast; sea, moderate; wire angle, 03°. | | | | | | | | | | | 107.32 |
| 0 | 13.20 | 33.55 | 6.19 | 273 | 0 | 13.20 | 33.55 | 6.19 | 25.25 | 273 | 0.00 |
| 10 | 12.50 | 33.55 | 5.94 | 260 | 10 | 12.50 | 33.55 | 5.94 | 25.39 | 260 | 0.03 |
| 25 | 11.21 | 33.42 | 4.61 | 246 | 20 | 11.63 | 33.47 | 4.99 | 25.49 | 250 | 0.05 |
| 48 | 9.83 | 33.66 | 3.54 | 206 | 30 | 10.90 | 33.42 | 4.39 | 25.58 | 241 | 0.08 |
| 72 | 9.70 | 33.86 | 2.76 | 189 | 50 | 9.79 | 33.67 | 3.48 | 25.97 | 204 | 0.12 |
| 94 | 9.54 | 33.96 | 2.18 | 179 | 75 | 9.67 | 33.87 | 2.65 | 26.15 | 188 | 0.17 |
| 144 | 9.28 | 34.13 | 1.58 | 162 | 100 | 9.50 | 33.99 | 2.06 | 26.27 | 176 | 0.22 |
| 191 | 9.09 | 34.25 | 1.46 | 151 | 150 | 9.25 | 34.14 | 1.55 | 26.43 | 161 | 0.30 |
| 240 | 8.60 | 34.29 | 1.12 | 140 | 200 | 9.03 | 34.26 | 1.42 | 26.55 | 149 | 0.38 |
| | | | | | 250 | (8.49) | (34.29) | (1.01) | (26.66) | (139) | (0.46) |
| CREST; June 21, 1952; 1803 GCT; 30°16'N, 116°22.5'W; sounding, 1000 fm; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 12°. | | | | | | | | | | | 107.35 |
| 0 | 15.90 | 33.33 | 5.70 | 344 | 0 | 15.90 | 33.33 | 5.70 | 24.51 | 344 | 0.00 |
| 10 | 15.79 | 33.33 | 5.83 | 341 | 10 | 15.79 | 33.33 | 5.83 | 24.53 | 341 | 0.03 |
| 20 | 15.51 | 33.33 | 5.82 | 335 | 20 | 15.51 | 33.33 | 5.82 | 24.59 | 335 | 0.07 |
| 34 | 13.73 | 33.35 | 6.26 | 298 | 30 | 14.10 | 33.34 | 6.22 | 24.90 | 306 | 0.10 |
| 48 | 13.07 | 33.39 | 6.07 | 282 | 50 | 12.95 | 33.38 | 6.06 | 25.17 | 281 | 0.16 |
| 62 | 11.50 | 33.26 | 6.06 | 263 | 75 | 10.34 | 33.26 | 4.75 | 25.56 | 244 | 0.22 |
| 75 | 10.34 | 33.26 | 4.75 | 244 | 100 | 9.91 | 33.66 | 3.38 | 25.94 | 207 | 0.28 |
| 93 | 10.04 | 33.55 | 3.79 | 217 | 150 | 8.80 | 33.87 | 3.20 | 26.29 | 174 | 0.38 |
| 113 | 9.62 | 33.77 | 3.26 | 194 | 200 | 8.52 | 34.06 | 2.42 | 26.48 | 156 | 0.46 |
| 138 | 9.07 | 33.84 | 3.26 | 181 | 250 | 8.34 | 34.18 | 1.52 | 26.60 | 145 | 0.54 |
| 181 | 8.53 | 34.02 | 2.68 | 159 | 300 | 7.93 | 34.26 | 0.90 | 26.72 | 133 | 0.61 |
| 224 | 8.46 | 34.12 | 2.05 | 151 | 400 | 7.10 | 34.31 | 0.53 | 26.88 | 118 | 0.74 |
| 267 | 8.22 | 34.22 | 1.26 | 140 | 500 | 6.32 | 34.33 | 0.40 | 27.00 | 106 | 0.86 |
| 360 | 7.43 | 34.29 | 0.62 | 124 | | | | | | | |
| 453 | 6.68 | 34.33 | 0.44 | 111 | | | | | | | |
| 555 | 5.93 | 34.33 | 0.37 | 102 | | | | | | | |

SIO

CCOFI 5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

107.40 CREST; June 21, 1952; 1454 GCT; 30°08'N, 116°42'W; sounding, 1500 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 26°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.14 | 33.28 | 5.84 | 352 | 0 | 16.14 | 33.28 | 5.84 | 24.41 | 352 | 0.00 |
| 9 | 16.14 | 33.28 | 5.84 | 352 | 10 | 16.14 | 33.28 | 5.85 | 24.41 | 352 | 0.04 |
| 18 | 16.13 | 33.28 | 6.03 | 352 | 20 | 16.12 | 33.28 | 6.03 | 24.42 | 352 | 0.07 |
| 31 | 16.11 | 33.28 | 5.94 | 352 | 30 | 16.11 | 33.28 | 5.96 | 24.42 | 352 | 0.11 |
| 44 | 15.03 | 33.27 | 5.69 | 330 | 50 | 14.00 | 33.29 | 5.70 | 24.89 | 307 | 0.17 |
| 58 | 13.19 | 33.31 | 5.72 | 290 | 75 | 12.03 | 33.21 | 5.85 | 25.22 | 276 | 0.25 |
| 72 | 12.19 | 33.21 | 5.86 | 279 | 100 | 10.51 | 33.35 | 4.35 | 25.60 | 240 | 0.31 |
| 90 | 10.86 | 33.26 | 4.80 | 252 | 150 | 9.39 | 33.91 | 2.94 | 26.22 | 180 | 0.42 |
| 112 | 10.14 | 33.58 | 3.92 | 217 | 200 | 8.69 | 34.03 | 2.57 | 26.43 | 161 | 0.50 |
| 139 | 9.58 | 33.84 | 3.18 | 189 | 250 | 8.00 | 34.10 | 2.21 | 26.59 | 146 | 0.58 |
| 184 | 8.89 | 34.00 | 2.60 | 166 | 300 | 7.48 | 34.19 | 1.35 | 26.73 | 132 | 0.65 |
| 229 | 8.30 | 34.07 | 2.47 | 152 | 400 | 6.76 | 34.29 | 0.64 | 26.91 | 115 | 0.78 |
| 275 | 7.69 | 34.14 | 1.74 | 138 | 500 | 6.20 | 34.29 | 0.51 | 26.99 | 108 | 0.90 |
| 369 | 6.97 | 34.29 | 0.72 | 118 | | | | | | | |
| 460 | 6.42 | 34.29 | 0.59 | 111 | | | | | | | |
| 562 | 5.86 | 34.29 | 0.39 | 104 | | | | | | | |

107.50 CREST; June 21, 1952; 0921 GCT; 29°50'N, 117°24'W; sounding, 1350 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.32 | 33.35 | 5.61 | 351 | 0 | 16.32 | 33.35 | 5.61 | 24.43 | 351 | 0.00 |
| 10 | 16.32 | 33.35 | 5.62 | 351 | 10 | 16.32 | 33.35 | 5.62 | 24.43 | 351 | 0.04 |
| 20 | 16.34 | 33.33 | 5.93 | 353 | 20 | 16.34 | 33.33 | 5.93 | 24.41 | 353 | 0.07 |
| 35 | 16.34 | 33.37 | 6.85 | 350 | 30 | 16.33 | 33.36 | 6.76 | 24.43 | 351 | 0.11 |
| 49 | 15.09 | 33.26 | 6.29 | 332 | 50 | 15.00 | 33.26 | 6.29 | 24.65 | 330 | 0.17 |
| 63 | 13.70 | 33.22 | 6.92 | 307 | 75 | 12.25 | 33.19 | 6.62 | 25.16 | 282 | 0.25 |
| 77 | 12.10 | 33.19 | 6.59 | 279 | 100 | 10.30 | 33.38 | 4.85 | 25.66 | 234 | 0.32 |
| 95 | 10.54 | 33.31 | 5.14 | 243 | 150 | 9.12 | 33.80 | 3.62 | 26.18 | 184 | 0.42 |
| 118 | 9.80 | 33.58 | 4.20 | 211 | 200 | 8.38 | 34.00 | 3.05 | 26.45 | 159 | 0.51 |
| 144 | 9.22 | 33.78 | 3.69 | 187 | 250 | 8.05 | 34.10 | 2.43 | 26.58 | 146 | 0.59 |
| 190 | 8.48 | 33.96 | 3.18 | 163 | 300 | 7.46 | 34.15 | 1.69 | 26.71 | 135 | 0.66 |
| 236 | 8.18 | 34.09 | 2.61 | 149 | 400 | 6.70 | 34.23 | 0.84 | 26.87 | 119 | 0.79 |
| 281 | 7.64 | 34.13 | 1.98 | 138 | 500 | 6.03 | 34.26 | 0.69 | 26.99 | 108 | 0.91 |
| 380 | 6.84 | 34.22 | 0.89 | 121 | | | | | | | |
| 474 | 6.18 | 34.25 | 0.75 | 111 | | | | | | | |
| 577 | 5.68 | 34.34 | 0.37 | 98 | | | | | | | |

107.60 CREST; June 21, 1952; 0343 GCT; 29°33'N, 118°04'W; sounding, 2000 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 29°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.56 | 33.33 | 5.61 | 358 | 0 | 16.56 | 33.33 | 5.61 | 24.36 | 358 | 0.00 |
| 8 | 16.54 | 33.33 | 6.27 | 357 | 10 | 16.55 | 33.33 | 6.25 | 24.36 | 358 | 0.04 |
| 16 | 16.54 | 33.40 | 5.77 | 352 | 20 | 16.51 | 33.40 | 5.57 | 24.42 | 352 | 0.07 |
| 30 | 16.13 | 33.33 | 5.46 | 349 | 30 | 16.13 | 33.33 | 5.46 | 24.46 | 349 | 0.11 |
| 44 | 14.48 | 33.17 | 6.16 | 326 | 50 | 14.05 | 33.17 | 6.22 | 24.78 | 317 | 0.17 |
| 57 | 13.76 | 33.17 | 6.26 | 311 | 75 | 13.30 | 33.15 | 6.94 | 24.92 | 304 | 0.25 |
| 70 | 13.43 | 33.15 | 6.93 | 307 | 100 | 11.11 | 33.13 | 5.90 | 25.32 | 266 | 0.32 |
| 87 | 12.51 | 33.17 | 6.74 | 288 | 150 | 9.42 | 33.51 | 4.20 | 25.91 | 210 | 0.44 |
| 108 | 10.76 | 33.12 | 5.51 | 261 | 200 | 8.57 | 33.92 | 3.48 | 26.36 | 167 | 0.54 |
| 130 | 10.04 | 33.33 | 4.70 | 234 | 250 | 7.93 | 34.04 | 2.61 | 26.55 | 149 | 0.62 |
| 170 | 8.90 | 33.69 | 3.86 | 189 | 300 | 7.50 | 34.09 | 2.31 | 26.65 | 140 | 0.69 |
| 209 | 8.48 | 33.95 | 3.35 | 164 | 400 | 6.82 | 34.20 | 1.15 | 26.83 | 122 | 0.83 |
| 252 | 7.90 | 34.04 | 2.58 | 149 | 500 | 6.00 | 34.25 | 0.50 | 26.98 | 108 | 0.95 |
| 341 | 7.20 | 34.14 | 2.13 | 132 | | | | | | | |
| 430 | 6.61 | 34.23 | 0.71 | 117 | | | | | | | |
| 530 | 5.76 | 34.25 | 0.50 | 106 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| CREST; June 20, 1952; 2207 GCT; 29°14'N, 118°44'W; sounding, 2000 fm; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 10°. | | | | | | | | | | | 107.70 |
| 0 | 17.33 | 33.54 | 5.60 | 360 | 0 | 17.33 | 33.54 | 5.60 | 24.34 | 360 | 0.00 |
| 10 | 17.32 | 33.55 | 5.60 | 359 | 10 | 17.32 | 33.55 | 5.60 | 24.35 | 359 | 0.04 |
| 20 | 17.21 | 33.53 | 5.33 | 358 | 20 | 17.21 | 33.53 | 5.33 | 24.36 | 358 | 0.07 |
| 35 | 17.20 | 33.55 | 6.08 | 356 | 30 | 17.20 | 33.54 | 5.94 | 24.37 | 357 | 0.11 |
| 54 | 15.57 | 33.33 | 6.05 | 337 | 50 | 16.05 | 33.38 | 6.05 | 24.51 | 343 | 0.18 |
| 68 | 15.07 | 33.33 | 6.03 | 326 | 75 | 15.06 | 33.38 | 6.50 | 24.73 | 322 | 0.26 |
| 83 | 15.06 | 33.42 | 6.76 | 319 | 100 | 13.92 | 33.27 | 6.14 | 24.89 | 307 | 0.34 |
| 107 | 13.30 | 33.24 | 5.91 | 297 | 150 | 10.19 | 33.29 | 4.75 | 25.61 | 239 | 0.48 |
| 139 | 10.72 | 33.24 | 5.21 | 251 | 200 | 9.00 | 33.83 | 3.75 | 26.22 | 180 | 0.59 |
| 156 | 9.96 | 33.46 | 4.58 | 223 | 250 | 8.40 | 34.04 | 2.89 | 26.48 | 156 | 0.67 |
| 206 | 8.92 | 33.87 | 3.62 | 176 | 300 | 7.53 | 34.10 | 3.65 | 26.66 | 139 | 0.75 |
| 260 | 8.22 | 34.06 | 2.89 | 152 | 400 | 6.69 | 34.21 | 2.08 | 26.86 | 120 | 0.88 |
| 304 | 7.48 | 34.11 | 3.69 | 138 | 500 | 5.94 | 34.25 | 1.38 | 26.99 | 108 | 1.00 |
| 412 | 6.60 | 34.22 | 1.98 | 118 | 600 | 5.39 | 34.31 | 0.54 | 27.10 | 97 | 1.11 |
| 516 | 5.82 | 34.25 | 1.28 | 106 | | | | | | | |
| 623 | 5.28 | 34.33 | 0.35 | 94 | | | | | | | |
| CREST; June 20, 1952; 1641 GCT; 28°54.5'N, 119°22.5'W; sounding, 2000 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 14°. | | | | | | | | | | | 107.80 |
| 0 | 17.19 | 33.44 | 5.58 | 364 | 0 | 17.19 | 33.44 | 5.58 | 24.29 | 364 | 0.00 |
| 9 | 17.18 | 33.40 | 5.78 | 367 | 10 | 17.18 | 33.40 | 5.76 | 24.27 | 367 | 0.04 |
| 19 | 17.18 | 33.43 | 5.61 | 364 | 20 | 17.18 | 33.43 | 5.61 | 24.29 | 364 | 0.07 |
| 34 | 17.17 | 33.44 | 5.94 | 363 | 30 | 17.18 | 33.44 | 5.86 | 24.30 | 364 | 0.11 |
| 53 | 15.50 | 33.33 | 6.23 | 335 | 50 | 15.51 | 33.33 | 6.22 | 24.59 | 335 | 0.18 |
| 62 | 15.54 | 33.44 | 5.83 | 328 | 75 | 15.50 | 33.46 | 6.09 | 24.70 | 326 | 0.26 |
| 76 | 15.49 | 33.46 | 6.09 | 325 | 100 | 14.51 | 33.40 | 5.87 | 24.86 | 310 | 0.34 |
| 94 | 14.98 | 33.44 | 5.91 | 316 | 150 | 10.41 | 33.32 | 5.40 | 25.59 | 240 | 0.48 |
| 118 | 13.06 | 33.31 | 5.78 | 288 | 200 | 8.82 | 33.77 | 3.78 | 26.20 | 182 | 0.59 |
| 144 | 10.66 | 33.31 | 5.56 | 245 | 250 | 8.21 | 33.95 | 3.24 | 26.44 | 160 | 0.68 |
| 189 | 9.09 | 33.71 | 3.85 | 191 | 300 | 7.62 | 34.02 | 2.35 | 26.58 | 146 | 0.76 |
| 234 | 8.37 | 33.91 | 3.48 | 165 | 400 | 6.51 | 34.11 | 1.17 | 26.81 | 125 | 0.90 |
| 280 | 7.89 | 34.00 | 2.69 | 152 | 500 | 6.02 | 34.21 | 0.63 | 26.95 | 112 | 1.02 |
| 379 | 6.67 | 34.09 | 1.34 | 129 | | | | | | | |
| 474 | 6.14 | 34.18 | 0.71 | 115 | | | | | | | |
| 577 | 5.61 | 34.32 | 0.45 | 99 | | | | | | | |
| CREST; June 19, 1952; 0030 GCT; 29°50.5'N, 115°52'W; sounding, 44 fm; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 06°. | | | | | | | | | | | 110.33 |
| 0 | 13.52 | 33.35 | 6.11 | 294 | 0 | 13.52 | 33.35 | 6.11 | 25.03 | 294 | 0.00 |
| 10 | 13.30 | 33.33 | 6.17 | 291 | 10 | 13.30 | 33.33 | 6.17 | 25.06 | 291 | 0.03 |
| 20 | 12.34 | 33.39 | 5.80 | 269 | 20 | 12.34 | 33.39 | 5.80 | 25.30 | 269 | 0.06 |
| 30 | 11.83 | 33.49 | 5.03 | 252 | 30 | 11.83 | 33.49 | 5.03 | 25.47 | 252 | 0.08 |
| 50 | 10.74 | 33.58 | 3.77 | 227 | 50 | 10.74 | 33.58 | 3.77 | 25.74 | 227 | 0.13 |
| CREST; June 19, 1952; 0200, 0229 GCT; 29°46.5'N, 116°00'W; sounding, 600 fm; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 35°, 64°. | | | | | | | | | | | 110.35 |
| 0 | 16.58 | 33.35 | 5.77 | 357 | 0 | 16.58 | 33.35 | 5.77 | 24.37 | 357 | 0.00 |
| 8 | 16.59 | 33.35 | 6.33 | 357 | 10 | 16.58 | 33.35 | 6.31 | 24.37 | 357 | 0.04 |
| 15 | 16.56 | 33.31 | 5.71 | 359 | 20 | 16.55 | 33.35 | 5.67 | 24.37 | 356 | 0.07 |
| 25 | 16.53 | 33.35 | 5.66 | 356 | 30 | 16.50 | 33.35 | 5.68 | 24.39 | 355 | 0.11 |
| 34 | 14.53 | 33.26 | 6.12 | 320 | 50 | 11.50 | 33.31 | 5.60 | 25.39 | 259 | 0.17 |
| 43 | 13.14 | 33.26 | 6.30 | 293 | 75 | 10.21 | 33.57 | 3.75 | 25.82 | 219 | 0.23 |
| 49 | 11.80 | 33.31 | 5.73 | 265 | 100 | 9.72 | 33.80 | 3.15 | 26.08 | 194 | 0.28 |
| 60 | 10.85 | 33.35 | 4.81 | 245 | 150 | 9.09 | 33.94 | 2.96 | 26.29 | 174 | 0.37 |
| 73 | 10.31 | 33.55 | 3.93 | 222 | 200 | 8.73 | 34.15 | 1.98 | 26.52 | 153 | 0.46 |
| 84 | 9.98 | 33.71 | 3.25 | 204 | 250 | 8.34 | 34.25 | 1.33 | 26.65 | 139 | 0.53 |
| 103 | 9.68 | 33.80 | 3.14 | 193 | 300 | 7.98 | 34.28 | 0.96 | 26.73 | 132 | 0.60 |
| 122 | 9.46 | 33.80 | 3.31 | 190 | | | | | | | |
| 142 | 9.14 | 33.89 | 3.13 | 178 | | | | | | | |
| 182 | 8.86 | 34.11 | 2.27 | 157 | | | | | | | |
| 238 | 8.45 | 34.23 | 1.47 | 143 | | | | | | | |
| 317 | 7.90 | 34.29 | 0.89 | 130 | | | | | | | |

S10

CCOFI 5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

110.40 CREST; June 19, 1952; 0538 GCT; 29°36.5'N, 116°19.5'W; sounding, 1360 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.73 | 33.37 | 5.68 | 359 | 0 | 16.73 | 33.37 | 5.68 | 24.35 | 359 | 0.00 |
| 9 | 16.74 | 33.37 | 5.81 | 359 | 10 | 16.74 | 33.37 | 5.81 | 24.35 | 359 | 0.04 |
| 19 | 16.73 | 33.35 | 5.91 | 360 | 20 | 16.73 | 33.35 | 5.90 | 24.33 | 360 | 0.07 |
| 33 | 16.73 | 33.35 | 5.76 | 360 | 30 | 16.73 | 33.35 | 5.78 | 24.33 | 360 | 0.11 |
| 51 | 14.49 | 33.21 | 6.19 | 323 | 50 | 14.63 | 33.21 | 6.17 | 24.69 | 326 | 0.18 |
| 64 | 12.92 | 33.20 | 6.08 | 293 | 75 | 12.30 | 33.21 | 5.85 | 25.16 | 281 | 0.25 |
| 77 | 12.09 | 33.22 | 5.85 | 277 | 100 | 10.26 | 33.42 | 4.45 | 25.70 | 230 | 0.32 |
| 96 | 10.32 | 33.30 | 4.86 | 240 | 150 | 9.40 | 33.91 | 3.04 | 26.22 | 181 | 0.42 |
| 124 | 10.04 | 33.80 | 3.49 | 199 | 200 | 8.88 | 34.09 | 2.35 | 26.45 | 159 | 0.51 |
| 140 | 9.62 | 33.87 | 3.20 | 187 | 250 | 8.55 | 34.22 | | 26.60 | 145 | 0.59 |
| 185 | 8.96 | 34.02 | 2.60 | 166 | 300 | 8.17 | 34.24 | | 26.67 | 138 | 0.66 |
| 234 | 8.66 | 34.20 | 1.85 | 148 | | | | | | | |
| 277 | 8.36 | 34.23 | - | 141 | | | | | | | |
| 377 | 7.53 | 34.31 | - | 124 | | | | | | | |

110.50 CREST; June 19, 1952; 1120, 1146 GCT; 29°17'N, 117°00'W; sounding, 1400 fm; wind, 330°, force 4; weather, overcast; sea, moderate; wire angle, 23°, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.76 | 33.39 | 5.71 | 358 | 0 | 16.76 | 33.39 | 5.71 | 24.36 | 358 | 0.00 |
| 9 | 16.77 | 33.42 | 6.01 | 356 | 10 | 16.77 | 33.42 | 6.01 | 24.38 | 356 | 0.04 |
| 23 | 16.77 | 33.42 | 5.81 | 356 | 20 | 16.77 | 33.42 | 5.84 | 24.38 | 356 | 0.07 |
| 46 | 14.02 | 33.39 | 6.80 | 300 | 30 | 16.76 | 33.41 | 5.99 | 24.37 | 357 | 0.11 |
| 68 | 11.79 | 33.46 | 5.04 | 254 | 50 | 13.57 | 33.39 | 6.40 | 25.05 | 292 | 0.17 |
| 90 | 10.77 | 33.68 | 4.38 | 220 | 75 | 11.30 | 33.55 | 4.75 | 25.61 | 238 | 0.24 |
| 138 | 9.88 | 33.98 | 3.93 | 183 | 100 | 10.36 | 33.74 | 4.22 | 25.93 | 208 | 0.30 |
| 182 | 10.16 | 34.31 | 1.19 | 163 | 150 | 9.95 | 34.08 | 3.60 | 26.26 | 177 | 0.39 |
| 226 | 9.70 | 34.42 | 1.00 | 147 | 200 | 10.08 | 34.37 | 1.13 | 26.47 | 157 | 0.48 |
| 270 | 9.22 | 34.42 | 0.78 | 140 | 250 | 9.47 | 34.42 | 0.86 | 26.61 | 144 | 0.56 |
| | | | | | 300 | 8.68 | 34.39 | 0.74 | 26.71 | 134 | 0.63 |
| 348 | 7.94 | 34.34 | 0.69 | 127 | 400 | 7.47 | 34.35 | 0.56 | 26.86 | 120 | 0.76 |
| 436 | 7.14 | 34.36 | 0.48 | 115 | 500 | 6.51 | 34.35 | 0.38 | 26.99 | 107 | 0.88 |
| 529 | 6.28 | 34.34 | 0.33 | 105 | 600 | 5.83 | 34.35 | 0.30 | 27.08 | 99 | 0.99 |
| 713 | 5.20 | 34.40 | 0.30 | 88 | 700 | 5.28 | 34.39 | 0.30 | 27.18 | 90 | 1.09 |
| 896 | 4.42 | 34.45 | 0.47 | 76 | 800 | 4.80 | 34.42 | 0.34 | 27.26 | 82 | 1.19 |
| 1092 | 3.80 | 34.52 | 0.84 | 64 | 1000 | 4.08 | 34.48 | 0.66 | 27.39 | 70 | 1.36 |

110.60 CREST; June 19, 1952; 1707 GCT; 28°54'N, 117°38'W; sounding, 2200 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 24°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.08 | 33.26 | 5.83 | 353 | 0 | 16.08 | 33.26 | 5.83 | 24.41 | 353 | 0.00 |
| 9 | 16.09 | 33.28 | 6.13 | 351 | 10 | 16.08 | 33.28 | 6.14 | 24.43 | 351 | 0.04 |
| 18 | 16.07 | 33.28 | 6.05 | 351 | 20 | 16.06 | 33.28 | 6.01 | 24.43 | 351 | 0.07 |
| 32 | 16.07 | 33.28 | 5.86 | 351 | 30 | 16.05 | 33.28 | 5.88 | 24.44 | 350 | 0.11 |
| 46 | 16.06 | 33.25 | 6.53 | 353 | 50 | 15.98 | 33.28 | 6.45 | 24.45 | 349 | 0.18 |
| 59 | 15.67 | 33.40 | 5.93 | 334 | 75 | 15.15 | 33.35 | 6.30 | 24.69 | 326 | 0.26 |
| 72 | 15.21 | 33.35 | 6.48 | 328 | 100 | 13.93 | 33.41 | 5.62 | 24.99 | 297 | 0.34 |
| 88 | 14.72 | 33.35 | 5.79 | 317 | 150 | 10.28 | 33.43 | 4.11 | 25.70 | 230 | 0.47 |
| 106 | 13.42 | 33.42 | 5.53 | 287 | 200 | 8.93 | 33.95 | 3.48 | 26.33 | 170 | 0.57 |
| 128 | 10.95 | 33.39 | 4.83 | 244 | 250 | 8.14 | 34.05 | 2.73 | 26.53 | 151 | 0.66 |
| 166 | 9.80 | 33.68 | 3.83 | 204 | 300 | 7.67 | 34.10 | 1.91 | 26.64 | 141 | 0.73 |
| 205 | 8.82 | 33.97 | 3.41 | 167 | 400 | 7.06 | 34.27 | 0.80 | 26.86 | 120 | 0.87 |
| 246 | 8.20 | 34.05 | 2.82 | 152 | 500 | 6.23 | 34.29 | 0.48 | 26.98 | 108 | 0.99 |
| 334 | 7.42 | 34.14 | 1.47 | 135 | | | | | | | |
| 424 | 6.94 | 34.29 | 0.67 | 117 | | | | | | | |
| 525 | 5.96 | 34.29 | 0.48 | 105 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

CREST; June 19, 1952; 2209 GCT; 28°36'N, 118°18'W; sounding, 2000 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 15°. 110.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.41 | 33.51 | 5.69 | 364 | 0 | 17.41 | 33.51 | 5.69 | 24.29 | 364 | 0.00 |
| 9 | 17.53 | 33.51 | 5.55 | 367 | 10 | 17.52 | 33.51 | 5.55 | 24.27 | 366 | 0.04 |
| 24 | 17.34 | 33.51 | 5.60 | 362 | 20 | 17.45 | 33.51 | 5.57 | 24.29 | 365 | 0.07 |
| 53 | 15.86 | 33.53 | 5.81 | 328 | 30 | 17.23 | 33.51 | 5.65 | 24.34 | 360 | 0.11 |
| 77 | 15.25 | 33.49 | 5.76 | 318 | 50 | 15.95 | 33.53 | 5.80 | 24.65 | 330 | 0.18 |
| 104 | 13.68 | 33.35 | 5.65 | 297 | 75 | 15.30 | 33.49 | 5.75 | 24.76 | 319 | 0.26 |
| 150 | 9.90 | 33.46 | 4.37 | 222 | 100 | 14.00 | 33.35 | 5.69 | 24.93 | 303 | 0.34 |
| 196 | 8.75 | 33.82 | 3.64 | 177 | 150 | 9.90 | 33.46 | 4.37 | 25.79 | 222 | 0.47 |
| 246 | 8.34 | 34.04 | 2.90 | 155 | 200 | 8.71 | 33.85 | 3.60 | 26.28 | 175 | 0.57 |
| 289 | 7.68 | 34.09 | 2.15 | 142 | 250 | 8.25 | 34.05 | 2.83 | 26.51 | 153 | 0.66 |
| 388 | 6.92 | 34.20 | 1.02 | 124 | 300 | 7.58 | 34.10 | 1.99 | 26.65 | 140 | 0.73 |
| 483 | 6.11 | 34.22 | 0.53 | 112 | 400 | 6.80 | 34.20 | 0.95 | 26.84 | 122 | 0.87 |
| 578 | 5.62 | 34.27 | 0.33 | 102 | 500 | 6.03 | 34.23 | 0.49 | 26.96 | 110 | 0.99 |
| 769 | 4.82 | 34.42 | 0.40 | 82 | 600 | 5.51 | 34.29 | 0.34 | 27.07 | 100 | 1.10 |
| 968 | 4.12 | 34.43 | 0.57 | 74 | 700 | 5.08 | 34.37 | 0.37 | 27.19 | 89 | 1.20 |
| 1168 | 3.63 | 34.51 | 0.80 | 63 | 800 | 4.70 | 34.43 | 0.42 | 27.28 | 80 | 1.30 |
| | | | | | 1000 | 4.04 | 34.43 | 0.60 | 27.35 | 73 | 1.47 |

CREST; June 20, 1952; 0342 GCT; 28°15'N, 118°58'W; sounding, 2000 fm; wind, 340°, force 3; weather, overcast; sea, rough; wire angle, 10°. 110.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.48 | 33.55 | 5.49 | 362 | 0 | 17.48 | 33.55 | 5.49 | 24.31 | 362 | 0.00 |
| 11 | 17.50 | 33.55 | 5.53 | 363 | 10 | 17.50 | 33.55 | 5.53 | 24.30 | 363 | 0.04 |
| 20 | 17.48 | 33.57 | 5.69 | 361 | 20 | 17.48 | 33.57 | 5.69 | 24.32 | 361 | 0.07 |
| 34 | 17.48 | 33.57 | 5.72 | 361 | 30 | 17.48 | 33.57 | 5.70 | 24.32 | 361 | 0.11 |
| 54 | 17.29 | 33.55 | 5.65 | 358 | 50 | 17.44 | 33.56 | 5.65 | 24.33 | 361 | 0.18 |
| 65 | 15.46 | 33.35 | 5.92 | 333 | 75 | 15.33 | 33.37 | 5.92 | 24.66 | 329 | 0.27 |
| 81 | 15.22 | 33.37 | 5.91 | 326 | 100 | 14.78 | 33.39 | 5.91 | 24.80 | 316 | 0.35 |
| 104 | 14.54 | 33.39 | 5.90 | 311 | 150 | 10.65 | 33.49 | 4.67 | 25.68 | 232 | 0.49 |
| 134 | 11.37 | 33.37 | 5.02 | 253 | 200 | 9.51 | 33.86 | 3.52 | 26.16 | 186 | 0.59 |
| 150 | 10.65 | 33.49 | 4.67 | 232 | 250 | 8.67 | 34.05 | 2.72 | 26.45 | 159 | 0.68 |
| 199 | 9.54 | 33.86 | 3.52 | 186 | 300 | 8.22 | 34.21 | 1.76 | 26.64 | 141 | 0.76 |
| 253 | 8.64 | 34.07 | 2.62 | 157 | 400 | 7.40 | 34.29 | 0.86 | 26.82 | 123 | 0.90 |
| 298 | 8.23 | 34.20 | 1.76 | 142 | 500 | 6.39 | 34.34 | 0.53 | 27.00 | 106 | 1.02 |
| 403 | 7.34 | 34.29 | 0.83 | 122 | 600 | 5.78 | 34.36 | 0.40 | 27.10 | 98 | 1.13 |
| 507 | 6.34 | 34.34 | - | 106 | | | | | | | |
| 616 | 5.74 | 34.36 | 0.39 | 97 | | | | | | | |

CREST; June 20, 1952; 0900 GCT; 27°57'N, 119°36'W; sounding, 2200 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 18°. 110.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.69 | 33.57 | 5.45 | 366 | 0 | 17.69 | 33.57 | 5.45 | 24.27 | 366 | 0.00 |
| 9 | 17.68 | 33.57 | 5.65 | 366 | 10 | 17.68 | 33.57 | 5.65 | 24.28 | 366 | 0.04 |
| 23 | 17.71 | 33.57 | 5.56 | 366 | 20 | 17.71 | 33.57 | 5.59 | 24.27 | 366 | 0.07 |
| 278 | 8.93 | 34.22 | 1.62 | 150 | | | | | | | |
| 371 | 7.77 | 34.25 | 0.94 | 131 | | | | | | | |
| 460 | 7.02 | 34.31 | 0.53 | 117 | | | | | | | |
| 554 | 6.31 | 34.34 | 0.37 | 105 | | | | | | | |
| 741 | 5.02 | 34.36 | 0.36 | 89 | | | | | | | |
| 926 | 4.34 | 34.45 | 0.58 | 75 | | | | | | | |
| 1125 | 3.72 | 34.49 | 0.79 | 66 | | | | | | | |
| | | | | | 300 | 8.60 | 34.23 | 1.43 | 26.60 | 145 | 0.00a) |
| | | | | | 400 | 7.51 | 34.27 | 0.81 | 26.79 | 126 | 0.14a) |
| | | | | | 500 | 6.72 | 34.33 | 0.43 | 26.95 | 111 | 0.27a) |
| | | | | | 600 | 5.94 | 34.34 | 0.37 | 27.06 | 101 | 0.38a) |
| | | | | | 700 | 5.25 | 34.36 | 0.36 | 27.16 | 91 | 0.49a) |
| | | | | | 800 | 4.78 | 34.38 | 0.40 | 27.23 | 85 | 0.58a) |
| | | | | | 1000 | 4.10 | 34.48 | 0.65 | 27.38 | 70 | 0.76a) |

a) This value is calculated with respect to the 300-decibar surface rather than the sea surface.

SIO

CCOFI 5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

113.30 CREST; June 18, 1952; 1924 GCT; 29°25'N, 115°20'W; sounding, 35 fm; wind, 300°, force 5; weather, partly cloudy; sea, rough; wire angle, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.09 | 33.62 | 6.21 | 266 | 0 | 13.09 | 33.62 | 6.21 | 25.33 | 266 | 0.00 |
| 10 | 11.74 | 33.71 | 4.36 | 234 | 10 | 11.74 | 33.71 | 4.36 | 25.66 | 234 | 0.02 |
| 20 | 10.34 | 33.86 | 2.25 | 199 | 20 | 10.34 | 33.86 | 2.25 | 26.02 | 199 | 0.05 |
| 30 | 10.24 | 33.95 | 1.70 | 191 | 30 | 10.24 | 33.95 | 1.70 | 26.11 | 191 | 0.07 |
| 50 | 10.24 | 33.96 | - | 190 | 50 | 10.24 | 33.96 | | 26.12 | 190 | 0.10 |

113.40 CREST; June 18, 1952; 1424 GCT; 29°02'N, 115°58'W; sounding, 1000 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.70 | | 5.53 | | 0 | 16.70 | | 5.53 | | | |
| 9 | 16.70 | | 5.73 | | 10 | 16.70 | | 5.77 | | | |
| 19 | 16.70 | | 5.92 | | 20 | 16.69 | | 5.94 | | | |
| 33 | 16.62 | | 6.08 | | 30 | 16.64 | | 6.07 | | | |
| 47 | 16.40 | | 5.91 | | 50 | 16.30 | | 5.92 | | | |
| 61 | 13.56 | | 6.14 | | 75 | 12.24 | | 5.46 | | | |
| 75 | 12.24 | | 5.46 | | 100 | 10.72 | | 3.81 | | | |
| 93 | 10.76 | | 4.12 | | 150 | 10.01 | | 3.07 | | | |
| 114 | 10.62 | | 3.37 | | 200 | 9.29 | | 2.24 | | | |
| 140 | 10.09 | | 3.15 | | 250 | 9.11 | | 1.54 | | | |
| 183 | 9.70 | | 2.39 | | 300 | 9.10 | | 0.73 | | | |
| 226 | 9.04 | | 1.98 | | 400 | 8.11 | | 0.31 | | | |
| 272 | 9.15 | | 1.13 | | 500 | 7.08 | | 0.35 | | | |
| 366 | 8.54 | | 0.31 | | | | | | | | |
| 459 | 7.46 | | 0.37 | | | | | | | | |
| 563 | 6.64 | | 0.32 | | | | | | | | |

113.50 CREST; June 18, 1952; 0845 GCT; 28°42'N, 116°38'W; sounding, 2000 fm; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.66 | 33.35 | 5.90 | 359 | 0 | 16.66 | 33.35 | 5.90 | 24.35 | 359 | 0.00 |
| 10 | 16.66 | 33.39 | 5.56 | 356 | 10 | 16.66 | 33.39 | 5.56 | 24.38 | 356 | 0.04 |
| 19 | 16.60 | 33.39 | 5.76 | 354 | 20 | 16.60 | 33.39 | 5.78 | 24.39 | 354 | 0.07 |
| 34 | 15.63 | 33.39 | 5.90 | 333 | 30 | 15.90 | 33.39 | 5.89 | 24.55 | 339 | 0.11 |
| 48 | 15.29 | 33.40 | 5.78 | 326 | 50 | 15.21 | 33.40 | 5.79 | 24.71 | 324 | 0.17 |
| 63 | 14.52 | 33.33 | 6.08 | 315 | 75 | 12.90 | 33.21 | 5.80 | 25.05 | 292 | 0.25 |
| 77 | 12.72 | 33.21 | 5.77 | 289 | 100 | 10.95 | 33.37 | 4.46 | 25.54 | 246 | 0.32 |
| 95 | 11.36 | 33.35 | 4.78 | 254 | 150 | 10.21 | 34.06 | 2.17 | 26.20 | 182 | 0.43 |
| 117 | 10.32 | 33.60 | 3.44 | 218 | 200 | 10.09 | 34.40 | 1.21 | 26.49 | 155 | 0.51 |
| 143 | 10.24 | 34.00 | 2.33 | 187 | 250 | 10.05 | 34.52 | 0.81 | 26.59 | 146 | 0.59 |
| 187 | 10.04 | 34.25 | 1.49 | 166 | 300 | 9.35 | 34.50 | 1.02 | 26.69 | 136 | 0.66 |
| 232 | 10.28 | 34.52 | 0.61 | 149 | 400 | 8.22 | 34.46 | 0.33 | 26.84 | 122 | 0.80 |
| 277 | 9.68 | 34.51 | 1.13 | 141 | 500 | 7.16 | 34.44 | 0.23 | 26.98 | 109 | 0.92 |
| 374 | 8.46 | 34.47 | 0.43 | 125 | | | | | | | |
| 468 | 7.60 | 34.45 | 0.23 | 114 | | | | | | | |
| 569 | 6.39 | 34.42 | 0.30 | 100 | | | | | | | |

113.60 CREST; June 18, 1952; 0301 GCT; 28°22'N, 117°17'W; sounding, 2050 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.00 | 33.37 | 5.61 | 365 | 0 | 17.00 | 33.37 | 5.61 | 24.29 | 365 | 0.00 |
| 9 | 16.97 | 33.37 | 5.61 | 364 | 10 | 16.95 | 33.37 | 5.62 | 24.30 | 364 | 0.04 |
| 18 | 16.90 | 33.35 | 5.68 | 364 | 20 | 16.88 | 33.35 | 5.68 | 24.30 | 364 | 0.07 |
| 32 | 16.71 | 33.37 | 5.69 | 358 | 30 | 16.74 | 33.37 | 5.69 | 24.35 | 359 | 0.11 |
| 46 | 16.49 | 33.39 | 5.71 | 352 | 50 | 16.00 | 33.38 | 5.78 | 24.52 | 342 | 0.18 |
| 59 | 15.04 | 33.35 | 5.95 | 324 | 75 | 15.20 | 33.52 | 5.73 | 24.81 | 315 | 0.26 |
| 72 | 15.24 | 33.53 | 5.77 | 315 | 100 | 11.65 | 33.31 | 5.19 | 25.36 | 262 | 0.33 |
| 87 | 13.60 | 33.35 | 5.70 | 295 | 150 | 9.79 | 33.74 | 3.64 | 26.02 | 199 | 0.45 |
| 106 | 11.24 | 33.31 | 4.94 | 255 | 200 | 8.90 | 34.01 | 2.98 | 26.38 | 166 | 0.54 |
| 128 | 10.26 | 33.57 | 4.19 | 219 | 250 | 8.22 | 34.07 | 2.55 | 26.53 | 151 | 0.63 |
| 167 | 9.48 | 33.87 | 3.37 | 185 | 300 | 7.65 | 34.11 | 1.64 | 26.65 | 140 | 0.70 |
| 205 | 8.82 | 34.02 | 2.94 | 164 | 400 | 6.98 | 34.23 | 0.72 | 26.84 | 122 | 0.84 |
| 247 | 8.27 | 34.07 | 2.61 | 152 | 500 | 6.31 | 34.32 | 0.46 | 27.00 | 107 | 0.96 |
| 334 | 7.34 | 34.14 | 1.18 | 134 | | | | | | | |
| 424 | 6.87 | 34.27 | 0.63 | 118 | | | | | | | |
| 525 | 6.10 | 34.33 | 0.43 | 104 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; June 17, 1952; 2133 GCT; 28°02'N, 117°55'W; sounding, 2000 fm; wind, 330°, force missing; weather, cloudy; sea, rough; wire angle, 08°. 113.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.88 | 33.55 | 5.61 | 372 | 0 | 17.88 | 33.55 | 5.61 | 24.21 | 372 | 0.00 |
| 10 | 17.82 | 33.58 | 5.53 | 368 | 10 | 17.82 | 33.58 | 5.53 | 24.25 | 368 | 0.04 |
| 20 | 17.76 | 33.58 | 5.58 | 367 | 20 | 17.76 | 33.58 | 5.58 | 24.26 | 367 | 0.07 |
| 35 | 17.08 | 33.55 | 6.03 | 353 | 30 | 17.65 | 33.56 | 6.01 | 24.28 | 366 | 0.11 |
| 49 | 16.74 | 33.53 | 5.95 | 347 | 50 | 16.74 | 33.53 | 5.93 | 24.47 | 347 | 0.18 |
| 64 | 16.62 | 33.57 | 5.75 | 342 | 75 | 16.54 | 33.55 | 5.75 | 24.53 | 341 | 0.27 |
| 78 | 16.51 | 33.55 | 5.75 | 341 | 100 | 16.23 | 33.55 | 5.64 | 24.60 | 335 | 0.35 |
| 96 | 16.28 | 33.55 | 5.64 | 336 | 150 | 11.63 | 33.41 | 4.58 | 25.44 | 254 | 0.50 |
| 119 | 15.69 | 33.53 | 5.61 | 324 | 200 | 9.86 | 33.96 | 2.83 | 26.18 | 184 | 0.61 |
| 145 | 11.97 | 33.41 | 4.91 | 260 | 250 | 8.51 | 34.03 | 2.89 | 26.46 | 158 | 0.70 |
| 192 | 10.10 | 33.95 | 2.82 | 189 | 300 | 7.85 | 34.09 | 1.98 | 26.60 | 144 | 0.78 |
| 239 | 8.82 | 34.01 | 2.92 | 164 | 400 | 7.00 | 34.23 | 0.78 | 26.83 | 122 | 0.92 |
| 285 | 7.99 | 34.07 | 2.33 | 148 | 500 | 6.21 | 34.30 | 0.49 | 26.99 | 107 | 1.04 |
| 384 | 7.13 | 34.22 | 0.88 | 125 | 600 | (5.69) | (34.37) | | (27.12) | (96) | (1.15) |
| 481 | 6.33 | 34.29 | 0.51 | 109 | | | | | | | |
| 585 | 5.76 | 34.36 | 0.42 | 97 | | | | | | | |

CREST; June 16, 1952; 1641 GCT; 28°55.5'N, 114°42.5'W; sounding, 44 fm; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 00°. 117.26

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.35 | 33.51 | 5.94 | 298 | 0 | 14.35 | 33.51 | 5.94 | 24.98 | 298 | 0.00 |
| 10 | 11.26 | 33.69 | 3.59 | 227 | 10 | 11.26 | 33.69 | 3.59 | 25.73 | 227 | 0.03 |
| 20 | 10.54 | 33.78 | 2.69 | 208 | 20 | 10.54 | 33.78 | 2.69 | 25.93 | 208 | 0.05 |
| 30 | 10.09 | 33.80 | 2.58 | 200 | 30 | 10.09 | 33.80 | 2.58 | 26.02 | 200 | 0.07 |
| 50 | 9.72 | 33.95 | 1.96 | 183 | 50 | 9.72 | 33.95 | 1.96 | 26.20 | 183 | 0.11 |

CREST; June 16, 1952; 1838 GCT; 28°48'N, 114°56.5'W; sounding, 57 fm; wind, 330°, force 3; weather, overcast; sea, moderate; wire angle, 05°. 117.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.62 | 33.60 | 6.35 | 258 | 0 | 12.62 | 33.60 | 6.35 | 25.40 | 258 | 0.00 |
| 10 | 12.48 | 33.60 | 6.03 | 256 | 10 | 12.48 | 33.60 | 6.03 | 25.43 | 256 | 0.03 |
| 20 | 12.10 | 33.58 | 5.91 | 250 | 20 | 12.10 | 33.58 | 5.91 | 25.49 | 250 | 0.05 |
| 30 | 11.92 | 33.58 | 5.63 | 247 | 30 | 11.92 | 33.58 | 5.63 | 25.52 | 247 | 0.08 |
| 50 | 11.52 | 33.58 | 5.08 | 240 | 50 | 11.52 | 33.58 | 5.08 | 25.60 | 240 | 0.12 |
| 74 | 9.59 | 33.84 | 3.43 | 189 | 75 | (9.59) | (33.86) | (3.37) | (26.15) | (187) | (0.18) |

CREST; June 16, 1952; 2341 GCT; 28°28'N, 115°37'W; sounding, 550 fm; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 10°. 117.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.11 | 33.49 | 5.83 | 315 | 0 | 15.11 | 33.49 | 5.83 | 24.81 | 315 | 0.00 |
| 10 | 14.32 | 33.48 | 6.10 | 300 | 10 | 14.32 | 33.48 | 6.10 | 24.97 | 300 | 0.03 |
| 24 | 12.38 | 33.39 | 5.93 | 269 | 20 | 12.95 | 33.39 | 6.01 | 25.18 | 280 | 0.06 |
| 49 | 11.90 | 33.49 | 5.34 | 253 | 30 | 12.20 | 33.40 | 5.80 | 25.33 | 265 | 0.09 |
| 72 | 10.98 | 33.64 | 4.41 | 226 | 50 | 11.88 | 33.50 | 5.30 | 25.47 | 252 | 0.14 |
| 98 | 9.82 | 33.80 | 3.73 | 195 | 75 | 10.60 | 33.67 | 4.36 | 25.83 | 218 | 0.20 |
| 149 | 9.42 | 34.05 | 2.30 | 170 | 100 | 9.79 | 33.81 | 3.66 | 26.08 | 194 | 0.25 |
| 197 | 8.80 | 34.22 | 1.77 | 148 | 150 | 9.39 | 34.05 | 2.29 | 26.33 | 170 | 0.34 |
| 242 | 9.62 | 34.49 | 0.43 | 141 | 200 | 8.80 | 34.23 | 1.72 | 26.57 | 148 | 0.42 |
| 289 | 8.93 | 34.42 | 0.44 | 136 | 250 | 9.60 | 34.49 | 0.43 | 26.64 | 141 | 0.50 |
| 331 | 8.75 | 34.42 | 0.40 | 133 | 300 | 8.88 | 34.42 | 0.42 | 26.70 | 135 | 0.57 |
| 388 | 8.14 | 34.36 | 0.53 | 128 | 400 | 8.13 | 34.36 | 0.51 | 26.77 | 128 | 0.71 |
| 435 | 8.07 | 34.38 | 0.37 | 126 | 500 | 7.00 | 34.33 | 0.51 | 26.91 | 115 | 0.84 |
| 480 | 7.16 | 34.33 | 0.52 | 117 | 600 | (6.50) | (34.39) | | (27.03) | (104) | (0.95) |
| 588 | 6.54 | 34.38 | 0.33 | 105 | | | | | | | |

SIO

CCOFI
5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **117.50** | CREST; June 17, 1952; 0502 GCT; 28°07.5'N, 116°15'W; sounding, 2000 fm; wind, 240°, force 3; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 15.29 | 33.53 | 6.14 | 316 | 0 | 15.29 | 33.53 | 6.14 | 24.80 | 316 | 0.00 |
| 10 | 13.25 | 33.44 | 6.00 | 282 | 10 | 13.25 | 33.44 | 6.00 | 25.16 | 282 | 0.03 |
| 20 | 12.35 | 33.42 | 5.58 | 267 | 20 | 12.35 | 33.42 | 5.58 | 25.32 | 267 | 0.06 |
| 35 | 12.25 | 33.49 | 5.26 | 260 | 30 | 12.28 | 33.48 | 5.36 | 25.38 | 261 | 0.08 |
| 50 | 10.60 | 33.49 | 5.00 | 231 | 50 | 10.60 | 33.49 | 5.00 | 25.69 | 231 | 0.13 |
| 65 | 10.30 | 33.69 | 3.04 | 211 | 75 | 10.25 | 33.78 | 2.43 | 25.98 | 204 | 0.19 |
| 79 | 10.22 | 33.80 | 2.42 | 202 | 100 | 9.94 | 33.99 | 2.51 | 26.19 | 183 | 0.24 |
| 98 | 9.94 | 33.95 | 2.52 | 186 | 150 | 10.34 | 34.35 | 1.12 | 26.41 | 163 | 0.32 |
| 121 | 10.44 | 34.25 | 1.53 | 172 | 200 | 10.27 | 34.51 | 0.37 | 26.54 | 150 | 0.40 |
| 148 | 10.34 | 34.34 | 1.17 | 164 | 250 | 9.55 | 34.51 | 0.34 | 26.66 | 138 | 0.48 |
| 193 | 10.30 | 34.51 | 0.38 | 151 | 300 | 8.90 | 34.48 | 0.32 | 26.75 | 131 | 0.55 |
| 239 | 9.65 | 34.51 | 0.35 | 140 | 400 | 7.65 | 34.43 | 0.30 | 26.90 | 116 | 0.68 |
| 285 | 9.11 | 34.49 | 0.33 | 133 | 500 | 6.77 | 34.42 | 0.23 | 27.01 | 105 | 0.80 |
| 382 | 7.85 | 34.43 | 0.31 | 119 | 600 | (6.16) | (34.42) | | (27.10) | (98) | (0.91) |
| 479 | 6.94 | 34.42 | 0.24 | 107 | | | | | | | |
| 582 | 6.27 | 34.42 | 0.21 | 99 | | | | | | | |
| **117.60** | CREST; June 17, 1952; 1037 GCT; 27°48'N, 116°54'W; sounding, 2000 fm; wind, 340°, force 3; weather, overcast; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | 15.46 | 33.35 | 5.88 | 333 | 0 | 15.46 | 33.35 | 5.88 | 24.62 | 333 | 0.00 |
| 11 | 15.41 | 33.35 | 5.95 | 332 | 10 | 15.41 | 33.35 | 5.95 | 24.63 | 332 | 0.03 |
| 26 | 15.35 | 33.32 | 5.91 | 333 | 20 | 15.38 | 33.33 | 5.93 | 24.62 | 333 | 0.07 |
| 41 | 14.98 | 33.37 | 6.41 | 321 | 30 | 15.30 | 33.33 | 5.98 | 24.64 | 331 | 0.10 |
| 55 | 14.39 | 33.37 | 5.06 | 309 | 50 | 14.76 | 33.37 | 6.19 | 24.79 | 317 | 0.16 |
| 70 | 12.21 | 33.35 | 3.98 | 269 | 75 | 11.10 | 33.35 | 3.80 | 25.49 | 250 | 0.24 |
| 87 | 10.71 | 33.49 | 3.42 | 233 | 100 | 10.67 | 33.71 | 2.65 | 25.85 | 216 | 0.29 |
| 107 | 10.66 | 33.82 | 2.28 | 207 | 150 | 10.00 | 34.11 | 1.18 | 26.28 | 175 | 0.39 |
| 133 | 10.16 | 34.02 | 1.35 | 184 | 200 | 9.70 | 34.32 | 1.38 | 26.49 | 155 | 0.48 |
| 175 | 9.88 | 34.25 | 1.13 | 163 | 250 | 8.30 | 34.20 | 0.73 | 26.62 | 143 | 0.55 |
| 216 | 9.38 | 34.33 | 1.54 | 149 | 300 | 7.80 | 34.22 | 0.71 | 26.71 | 134 | 0.63 |
| 260 | 8.14 | 34.20 | 0.70 | 140 | 400 | 6.87 | 34.30 | 0.53 | 26.91 | 116 | 0.76 |
| 350 | 7.35 | 34.27 | 0.72 | 124 | 500 | 6.33 | 34.38 | 0.36 | 27.04 | 103 | 0.87 |
| 442 | 6.54 | 34.33 | 0.38 | 109 | | | | | | | |
| 545 | 6.28 | 34.42 | 0.36 | 99 | | | | | | | |
| **117.70** | CREST; June 17, 1952; 1601 GCT; 27°24'N, 117°38'W; sounding, 2000 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 09°. | | | | | | | | | | |
| 0 | 17.19 | 33.39 | 5.66 | 368 | 0 | 17.19 | 33.39 | 5.66 | 24.26 | 368 | 0.00 |
| 10 | 17.20 | 33.39 | 5.95 | 368 | 10 | 17.20 | 33.39 | 5.95 | 24.25 | 368 | 0.04 |
| 20 | 17.20 | 33.39 | 5.78 | 368 | 20 | 17.20 | 33.39 | 5.78 | 24.25 | 368 | 0.07 |
| 35 | 17.10 | 33.39 | 5.61 | 366 | 30 | 17.17 | 33.39 | 5.64 | 24.26 | 367 | 0.11 |
| 49 | 16.18 | 33.31 | 6.41 | 351 | 50 | 16.09 | 33.31 | 6.41 | 24.45 | 349 | 0.18 |
| 64 | 15.78 | 33.52 | 5.85 | 327 | 75 | 15.30 | 33.49 | 5.94 | 24.76 | 319 | 0.27 |
| 78 | 15.18 | 33.49 | 5.95 | 317 | 100 | 12.25 | 33.31 | 5.73 | 25.25 | 273 | 0.34 |
| 97 | 13.08 | 33.30 | 5.86 | 289 | 150 | 10.64 | 33.87 | 3.28 | 25.98 | 203 | 0.46 |
| 120 | 11.18 | 33.53 | 4.26 | 238 | 200 | 9.97 | 34.12 | 2.15 | 26.29 | 174 | 0.56 |
| 148 | 10.68 | 33.86 | 3.33 | 205 | 250 | 9.43 | 34.34 | 1.22 | 26.55 | 149 | 0.64 |
| 194 | 10.01 | 34.09 | 2.27 | 177 | 300 | 8.80 | 34.37 | 0.74 | 26.68 | 137 | 0.71 |
| 240 | 9.54 | 34.31 | 1.38 | 153 | 400 | 7.43 | 34.34 | 0.60 | 26.86 | 120 | 0.85 |
| 287 | 8.98 | 34.38 | 0.78 | 139 | 500 | 6.30 | 34.34 | 0.39 | 27.01 | 105 | 0.97 |
| 385 | 7.65 | 34.34 | 0.63 | 123 | 600 | (5.68) | (34.34) | | (27.09) | (98) | (1.08) |
| 481 | 6.48 | 34.34 | 0.41 | 108 | | | | | | | |
| 586 | 5.76 | 34.34 | 0.36 | 99 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; June 16, 1952; 1203 GCT; 28°23'N, 114°15'W; sounding, 30 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | 120.25 |
| 0 | 16.34 | 33.55 | 6.00 | 337 | 0 | 16.34 | 33.55 | 6.00 | 24.58 | 337 | 0.00 |
| 10 | 16.36 | 33.55 | 6.00 | 337 | 10 | 16.36 | 33.55 | 6.00 | 24.57 | 337 | 0.03 |
| 20 | 11.70 | 33.46 | 4.86 | 252 | 20 | 11.70 | 33.46 | 4.86 | 25.47 | 252 | 0.06 |
| 30 | 11.36 | 33.51 | 4.55 | 242 | 30 | 11.36 | 33.51 | 4.55 | 25.57 | 242 | 0.09 |
| CREST; June 16, 1952; 0943 GCT; 28°13'N, 114°35'W; sounding, 50 fm; wind, 330°, force 4; weather, partly cloudy; sea, moderate; wire angle, 08°. | | | | | | | | | | | 120.30 |
| 0 | 14.80 | 33.57 | 6.00 | 303 | 0 | 14.80 | 33.57 | 6.00 | 24.93 | 303 | 0.00 |
| 10 | 14.82 | 33.55 | 6.02 | 305 | 10 | 14.82 | 33.55 | 6.02 | 24.91 | 305 | 0.03 |
| 20 | 14.78 | 33.55 | 5.96 | 304 | 20 | 14.78 | 33.55 | 5.96 | 24.92 | 304 | 0.06 |
| 30 | 13.50 | 33.48 | 5.68 | 284 | 30 | 13.50 | 33.48 | 5.68 | 25.14 | 284 | 0.09 |
| 49 | 10.80 | 33.48 | 4.08 | 235 | 50 | 10.80 | 33.48 | 4.00 | 25.65 | 235 | 0.14 |
| 74 | 10.09 | 33.75 | 2.73 | 203 | 75 | (10.08) | (33.76) | (2.70) | (25.99) | (202) | (0.20) |
| CREST; June 16, 1952; 0703 GCT; 28°03'N, 114°54'W; sounding, 47 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 15°. | | | | | | | | | | | 120.35 |
| 0 | 15.68 | 33.58 | 6.32 | 321 | 0 | 15.68 | 33.58 | 6.32 | 24.75 | 321 | 0.00 |
| 10 | 15.68 | 33.56 | 6.30 | 322 | 10 | 15.68 | 33.56 | 6.30 | 24.73 | 322 | 0.03 |
| 19 | 15.30 | 33.57 | 6.29 | 313 | 20 | 15.22 | 33.57 | 6.29 | 24.84 | 312 | 0.06 |
| 29 | 14.93 | 33.55 | 6.12 | 307 | 30 | 14.90 | 33.55 | 6.09 | 24.90 | 306 | 0.09 |
| 48 | 11.28 | 33.48 | 4.74 | 243 | 50 | 11.20 | 33.48 | 4.50 | 25.58 | 242 | 0.15 |
| 72 | 10.47 | 33.77 | 2.69 | 208 | 75 | (10.41) | (33.79) | (2.55) | (25.96) | (206) | (0.21) |
| CREST; June 15, 1952; 1755 GCT; 27°43'N, 115°33'W; sounding, 1180 fm; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 45°. | | | | | | | | | | | 120.45 |
| 0 | 16.11 | 33.49 | 5.76 | 336 | 0 | 16.11 | 33.49 | 5.76 | 24.58 | 336 | 0.00 |
| 8 | 16.09 | 33.53 | 5.74 | 333 | 10 | 16.07 | 33.53 | 5.74 | 24.62 | 333 | 0.03 |
| 19 | 15.97 | 33.53 | 5.76 | 330 | 20 | 15.91 | 33.53 | 5.75 | 24.66 | 329 | 0.07 |
| 39 | 11.84 | 33.44 | 4.70 | 256 | 30 | 13.30 | 33.47 | 5.45 | 25.17 | 281 | 0.10 |
| 57 | 11.04 | 33.60 | 3.90 | 230 | 50 | 11.28 | 33.53 | 4.11 | 25.60 | 239 | 0.15 |
| 75 | 9.86 | 33.68 | 3.63 | 205 | 75 | 9.86 | 33.68 | 3.63 | 25.97 | 205 | 0.21 |
| 106 | 10.21 | 33.98 | 2.46 | 188 | 100 | 10.06 | 33.93 | 2.76 | 26.13 | 190 | 0.25 |
| 136 | 10.58 | 34.33 | 1.45 | 168 | 150 | 10.52 | 34.41 | 1.18 | 26.42 | 162 | 0.34 |
| 168 | 10.36 | 34.42 | 0.98 | 158 | 200 | 9.82 | 34.42 | 0.90 | 26.55 | 149 | 0.42 |
| 195 | 9.88 | 34.42 | 0.91 | 150 | 250 | 9.47 | 34.46 | 0.59 | 26.64 | 141 | 0.50 |
| 257 | 9.43 | 34.47 | 0.55 | 140 | 300 | 9.01 | 34.51 | 0.39 | 26.75 | 130 | 0.57 |
| 317 | 8.83 | 34.51 | 0.33 | 127 | 400 | 8.07 | 34.48 | 0.23 | 26.88 | 118 | 0.70 |
| 377 | 8.28 | 34.49 | 0.23 | 121 | 500 | 6.93 | 34.45 | 0.24 | 27.02 | 105 | 0.82 |
| 496 | 6.98 | 34.45 | 0.24 | 106 | 600 | 6.18 | 34.45 | 0.24 | 27.12 | 96 | 0.93 |
| 647 | 5.86 | 34.45 | 0.25 | 92 | 700 | 5.52 | 34.45 | 0.26 | 27.20 | 88 | 1.03 |
| 826 | 4.91 | 34.45 | 0.33 | 81 | 800 | 5.01 | 34.45 | 0.31 | 27.26 | 82 | 1.12 |
| CREST; June 15, 1952; 1357 GCT; 27°33'N, 115°52.5'W; sounding, 2200 fm; wind, 340°, force 6; weather, cloudy; sea, very rough; wire angle, 32°. | | | | | | | | | | | 120.50 |
| 0 | 17.24 | 33.55 | 5.62 | 357 | 0 | 17.24 | 33.55 | 5.62 | 24.37 | 357 | 0.00 |
| 10 | 17.25 | 33.53 | 5.63 | 359 | 10 | 17.25 | 33.53 | 5.63 | 24.35 | 359 | 0.04 |
| 19 | 17.25 | 33.53 | 5.65 | 359 | 20 | 17.25 | 33.53 | 5.65 | 24.35 | 359 | 0.07 |
| 33 | 15.75 | 33.48 | 5.96 | 329 | 30 | 16.00 | 33.48 | 5.93 | 24.60 | 335 | 0.11 |
| 51 | 12.19 | 33.49 | 4.95 | 258 | 50 | 12.40 | 33.49 | 5.00 | 25.36 | 262 | 0.17 |
| 64 | 11.06 | – | 3.92 | | 75 | 10.80 | 33.80 | 2.95 | 25.90 | 211 | 0.23 |
| 77 | 10.55 | 33.81 | 2.95 | 206 | 100 | 10.08 | 34.01 | 2.40 | 26.19 | 184 | 0.28 |
| 98 | 10.14 | 34.00 | 2.46 | 186 | 150 | 9.69 | 34.29 | 2.28 | 26.47 | 157 | 0.36 |
| 127 | 9.82 | 34.18 | 1.93 | 167 | 200 | 9.12 | 34.35 | 0.86 | 26.61 | 144 | 0.44 |
| 144 | 9.75 | 34.27 | 2.30 | 159 | 250 | 8.72 | 34.42 | 0.61 | 26.73 | 132 | 0.51 |
| 190 | 9.22 | 34.34 | 0.98 | 146 | 300 | 7.94 | 34.38 | 0.59 | 26.82 | 124 | 0.58 |
| 240 | 8.88 | 34.42 | 0.62 | 135 | 400 | 7.32 | 34.43 | 0.25 | 26.95 | 112 | 0.70 |
| 283 | 8.07 | 34.38 | 0.61 | 126 | 500 | 6.50 | 34.45 | 0.20 | 27.07 | 100 | 0.81 |
| 384 | 7.43 | 34.42 | 0.29 | 114 | 600 | (5.82) | (34.45) | (0.28) | (27.16) | (91) | (0.92) |
| 484 | 6.62 | 34.45 | 0.20 | 101 | | | | | | | |
| 592 | 5.88 | 34.45 | 0.28 | 92 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 120.60 | CREST; June 15, 1952; 0725 GCT; 27°12'N, 116°30'W; sounding, 2200 fm; wind, 330°, force 5; weather, clear; sea, very rough; wire angle, 31°. | | | | | | | | | | |
| 0 | 16.86 | 33.46 | 5.61 | 355 | 0 | 16.86 | 33.46 | 5.61 | 24.39 | 355 | 0.00 |
| 8 | 16.86 | 33.44 | 5.74 | 357 | 10 | 16.85 | 33.44 | 5.76 | 24.37 | 356 | 0.04 |
| 21 | 16.85 | 33.46 | 5.83 | 355 | 20 | 16.85 | 33.46 | 5.83 | 24.39 | 355 | 0.07 |
| 46 | 15.61 | 33.44 | 5.93 | 329 | 30 | 16.80 | 33.46 | 5.87 | 24.40 | 354 | 0.11 |
| 65 | 14.54 | 33.35 | 5.96 | 314 | 50 | 15.32 | 33.42 | 5.95 | 24.71 | 325 | 0.17 |
| 85 | 12.56 | 33.39 | 5.35 | 273 | 75 | 13.50 | 33.36 | 5.83 | 25.04 | 293 | 0.25 |
| 118 | 10.21 | 33.60 | 4.12 | 216 | 100 | 11.50 | 33.45 | 4.73 | 25.50 | 249 | 0.32 |
| 151 | 9.75 | 34.02 | 2.70 | 178 | 150 | 9.74 | 34.00 | 2.78 | 26.24 | 179 | 0.43 |
| 188 | 9.78 | 34.31 | 1.47 | 157 | 200 | 9.71 | 34.31 | 1.35 | 26.48 | 156 | 0.51 |
| 217 | 9.52 | 34.33 | 1.15 | 151 | 250 | 9.26 | 34.39 | 0.69 | 26.62 | 143 | 0.59 |
| 286 | 8.98 | 34.42 | 0.44 | 136 | 300 | 8.82 | 34.42 | 0.40 | 26.71 | 134 | 0.66 |
| 354 | 8.22 | 34.42 | 0.33 | 125 | 400 | 7.68 | 34.42 | 0.32 | 26.89 | 117 | 0.80 |
| 419 | 7.46 | 34.42 | 0.32 | 114 | 500 | 6.67 | 34.42 | 0.50 | 27.03 | 104 | 0.91 |
| 548 | 6.23 | 34.43 | 0.57 | 98 | 600 | 5.82 | 34.44 | 0.53 | 27.15 | 92 | 1.02 |
| 699 | 5.23 | 34.47 | 0.49 | 83 | 700 | 5.23 | 34.47 | (0.49) | 27.25 | 83 | 1.11 |
| 882 | 4.34 | 34.47 | - | 73 | 800 | 4.72 | 34.47 | | 27.31 | 77 | 1.20 |
| 120.70 | CREST; June 15, 1952; 0113 GCT; 26°52.5'N, 117°10'W; sounding, 2200 fm; wind, 330°, force 5; weather, clear; sea, very rough; wire angle, 28°. | | | | | | | | | | |
| 0 | 18.14 | 33.62 | 5.48 | 373 | 0 | 18.14 | 33.62 | 5.48 | 24.20 | 373 | 0.00 |
| 8 | 18.16 | 33.60 | 5.52 | 375 | 10 | 18.17 | 33.60 | 5.53 | 24.18 | 375 | 0.04 |
| 18 | 18.18 | 33.60 | 5.53 | 375 | 20 | 18.18 | 33.60 | 5.53 | 24.18 | 375 | 0.07 |
| 31 | 18.18 | 33.60 | 5.54 | 375 | 30 | 18.18 | 33.60 | 5.54 | 24.18 | 375 | 0.11 |
| 48 | 18.08 | 33.60 | 5.83 | 373 | 50 | 17.90 | 33.60 | 5.95 | 24.25 | 369 | 0.19 |
| 61 | 16.02 | 33.43 | 6.17 | 339 | 75 | 14.85 | 33.42 | 5.93 | 24.81 | 315 | 0.27 |
| 73 | 14.96 | 33.42 | 5.96 | 317 | 100 | 12.60 | 33.43 | 5.16 | 25.28 | 270 | 0.35 |
| 92 | 13.62 | 33.42 | 5.71 | 290 | 150 | 10.51 | 33.88 | 3.19 | 26.01 | 201 | 0.47 |
| 118 | 11.34 | 33.61 | 3.93 | 235 | 200 | 9.13 | 34.04 | 2.70 | 26.37 | 167 | 0.56 |
| 133 | 10.95 | 33.77 | 3.51 | 216 | 250 | 8.42 | 34.16 | 2.11 | 26.57 | 147 | 0.64 |
| 175 | 9.86 | 33.98 | 2.80 | 183 | 300 | 7.98 | 34.21 | 1.46 | 26.68 | 137 | 0.71 |
| 223 | 8.70 | 34.09 | 2.68 | 157 | 400 | 7.03 | 34.30 | 0.62 | 26.88 | 118 | 0.85 |
| 264 | 8.30 | 34.18 | 1.88 | 144 | 500 | 6.22 | 34.35 | 0.38 | 27.03 | 104 | 0.96 |
| 361 | 7.37 | 34.27 | 0.90 | 124 | | | | | | | |
| 461 | 6.52 | 34.34 | 0.41 | 108 | | | | | | | |
| 566 | 5.74 | 34.36 | 0.38 | 97 | | | | | | | |
| 120.80 | CREST; June 14, 1952; 1753, 1936 GCT; 26°33'N, 117°48'W; sounding, 2150 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 30°, 34°. | | | | | | | | | | |
| 0 | 17.88 | 33.45 | 5.22u | 379 | 0 | 17.88 | 33.45 | | 24.14 | 379 | 0.00 |
| 9 | 17.88 | 33.46 | 5.95 | 378 | 10 | 17.88 | 33.46 | 5.94 | 24.14 | 378 | 0.04 |
| 22 | 17.85 | 33.46 | 5.88 | 378 | 20 | 17.86 | 33.46 | 5.89 | 24.15 | 378 | 0.08 |
| 49 | 15.93 | 33.49 | - | 333 | 30 | 17.10 | 33.47 | | 24.34 | 360 | 0.11 |
| 70 | 15.20 | 33.48 | - | 318 | 50 | 15.89 | 33.49 | | 24.63 | 332 | 0.18 |
| 95 | 13.96 | 33.33 | 5.42 | 304 | 75 | 14.87 | 33.46 | | 24.83 | 312 | 0.26 |
| 141 | 10.87 | 33.77 | 3.38 | 215 | 100 | 12.59 | 33.33 | 5.32 | 25.20 | 278 | 0.34 |
| 182 | 10.38 | 34.10 | 2.20 | 182 | 150 | 10.78 | 33.91 | 2.83 | 25.99 | 203 | 0.46 |
| 228 | 9.29 | 34.14 | 2.25 | 162 | 200 | 10.06 | 34.12 | 2.20 | 26.28 | 175 | 0.56 |
| 267 | 8.60 | 34.18 | 1.81 | 148 | 250 | 8.81 | 34.16 | 2.04 | 26.51 | 153 | 0.64 |
| 356 | 7.78 | 34.27 | 1.02 | 130 | 300 | 8.29 | 34.22 | 1.48 | 26.64 | 141 | 0.72 |
| 442 | 6.66 | 34.23 | 0.69 | 118 | 400 | 7.16 | 34.25 | 0.80 | 26.83 | 123 | 0.85 |
| 530 | 6.19 | 34.36 | 0.29 | 102 | 500 | 6.32 | 34.32 | 0.33 | 27.00 | 107 | 0.98 |
| | | | | | 600 | 5.79 | 34.37 | 0.35 | 27.10 | 97 | 1.08 |
| 559 | 6.01 | 34.36 | 0.35 | 100 | 700 | 5.22 | 34.41 | 0.35 | 27.20 | 87 | 1.18 |
| 748 | 5.01 | 34.43 | 0.35 | 84 | 800 | 4.79 | 34.45 | 0.38 | 27.29 | 80 | 1.28 |
| 949 | 4.19 | 34.49 | 0.59 | 70 | 1000 | 4.00 | 34.50 | 0.63 | 27.41 | 68 | 1.44 |
| 1148 | 3.60 | 34.52 | 0.73 | 62 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| CREST; June 14, 1952; 1205 GCT; 26°10'N, 118°30'W; sounding, 2200 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 23°. | | | | | | | | | | | 120.90 |
| 0 | 18.52 | – | 5.38 | | 0 | 18.52 | (33.71) | 5.38 | (24.18) | (375) | (0.00) |
| 9 | 18.54 | 33.71 | 5.29 | 376 | 10 | 18.54 | 33.71 | 5.29 | 24.17 | 376 | 0.04 |
| 18 | 18.54 | 33.69 | 5.31 | 377 | 20 | 18.53 | 33.69 | 5.33 | 24.16 | 377 | 0.08 |
| 32 | 18.53 | 33.68 | 5.44 | 377 | 30 | 18.52 | 33.68 | 5.43 | 24.15 | 377 | 0.11 |
| 50 | 17.57 | 33.73 | 5.34 | 351 | 50 | 17.57 | 33.73 | 5.34 | 24.42 | 351 | 0.19 |
| 64 | 16.46 | 33.68 | 5.39 | 330 | 75 | 15.96 | 33.60 | 5.82 | 24.70 | 325 | 0.27 |
| 77 | 15.92 | 33.60 | 5.83 | 324 | 100 | 15.42 | 33.69 | 5.48 | 24.89 | 307 | 0.35 |
| 100 | 15.42 | 33.69 | 5.48 | 307 | 150 | 10.76 | 33.60 | 4.39 | 25.75 | 225 | 0.49 |
| 129 | 11.54 | 33.46 | 4.90 | 249 | 200 | 9.92 | 33.97 | 2.98 | 26.18 | 184 | 0.59 |
| 146 | 10.86 | 33.57 | 4.43 | 229 | 250 | 9.18 | 34.22 | 1.94 | 26.50 | 154 | 0.68 |
| 192 | 10.02 | 33.86 | 3.48 | 194 | 300 | 8.41 | 34.21 | 1.82 | 26.61 | 143 | 0.75 |
| 245 | 9.28 | 34.22 | 1.96 | 156 | 400 | 7.46 | 34.35 | 0.65 | 26.86 | 120 | 0.89 |
| 288 | 8.54 | 34.20 | 1.88 | 146 | 500 | 6.49 | 34.38 | 0.31 | 27.02 | 105 | 1.01 |
| 390 | 7.58 | 34.34 | 0.72 | 122 | 600 | (5.78) | (34.37) | (0.33) | (27.10) | (97) | (1.12) |
| 491 | 6.56 | 34.38 | 0.31 | 106 | | | | | | | |
| 599 | 5.78 | 34.37 | 0.33 | 97 | | | | | | | |
| CREST; June 13, 1952; 0539 GCT; 27°23'N, 114°41.5'W; sounding, 42 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | | 123.37 |
| 0 | 12.28 | 33.96 | 4.47 | 226 | 0 | 12.28 | 33.96 | 4.47 | 25.75 | 226 | 0.00 |
| 10 | 12.29 | 33.96 | 4.52 | 226 | 10 | 12.29 | 33.96 | 4.52 | 25.75 | 226 | 0.02 |
| 20 | 11.90 | 34.06 | 3.90 | 211 | 20 | 11.90 | 34.06 | 3.90 | 25.90 | 211 | 0.04 |
| 30 | 11.24 | 34.16 | 2.51 | 192 | 30 | 11.24 | 34.16 | 2.51 | 26.10 | 192 | 0.06 |
| 50 | 11.14 | 34.16 | 1.64 | 191 | 50 | 11.14 | 34.16 | 1.64 | 26.12 | 191 | 0.10 |
| CREST; June 13, 1952; 0728 GCT; 27°17'N, 114°51'W; sounding, 270 fm; wind, 340°, force 4; weather, clear; sea, rough; wire angle, 38°. | | | | | | | | | | | 123.40 |
| 0 | 13.72 | 33.53 | 5.93 | 284 | 0 | 13.72 | 33.53 | 5.93 | 25.13 | 284 | 0.00 |
| 8 | 13.65 | 33.53 | 5.93 | 283 | 10 | 13.62 | 33.53 | 5.92 | 25.15 | 282 | 0.03 |
| 20 | 12.80 | 33.57 | 5.12 | 264 | 20 | 12.80 | 33.57 | 5.12 | 25.35 | 264 | 0.06 |
| 40 | 11.06 | 34.00 | 2.15 | 201 | 30 | 11.70 | 33.83 | 2.97 | 25.76 | 225 | 0.08 |
| 60 | 10.88 | 34.20 | 1.59 | 183 | 50 | 10.92 | 34.12 | 1.78 | 26.12 | 190 | 0.12 |
| 74 | 10.88 | 34.23 | 1.45 | 181 | 75 | 10.89 | 34.23 | 1.45 | 26.22 | 181 | 0.17 |
| 148 | 10.96 | 34.60 | 0.31 | 155 | 100 | 10.91 | 34.33 | 1.08 | 26.29 | 174 | 0.21 |
| 187 | 10.76 | 34.57 | 0.31 | 154 | 150 | 10.95 | 34.60 | 0.31 | 26.49 | 155 | 0.30 |
| 229 | 10.32 | 34.56 | 0.37 | 147 | 200 | 10.64 | 34.57 | 0.32 | 26.52 | 152 | 0.38 |
| 279 | 9.76 | 34.56 | 0.34 | 138 | 250 | 10.05 | 34.56 | 0.35 | 26.62 | 143 | 0.45 |
| 326 | 8.94 | 34.49 | 0.42 | 131 | 300 | 9.47 | 34.54 | 0.38 | 26.70 | 135 | 0.52 |
| CREST; June 13, 1952; 1405 GCT; 26°55'N, 115°29.5'W; sounding, 2200 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 36°. | | | | | | | | | | | 123.50 |
| 0 | 17.09 | 33.39 | 5.59 | 365 | 0 | 17.09 | 33.39 | 5.59 | 24.28 | 365 | 0.00 |
| 8 | 17.10 | 33.36 | 5.58 | 368 | 10 | 17.10 | 33.36 | 5.59 | 24.25 | 368 | 0.04 |
| 20 | 17.07 | 33.37 | 5.63 | 366 | 20 | 17.07 | 33.37 | 5.63 | 24.27 | 366 | 0.07 |
| 45 | 15.64 | 33.26 | 5.88 | 343 | 30 | 17.05 | 33.37 | 5.74 | 24.27 | 366 | 0.11 |
| 65 | 15.23 | 33.42 | 5.88 | 323 | 50 | 15.50 | 33.26 | 5.88 | 24.54 | 340 | 0.18 |
| 88 | 13.36 | 33.37 | 5.78 | 289 | 75 | 14.50 | 33.39 | 5.87 | 24.86 | 310 | 0.26 |
| 128 | 10.19 | 33.49 | 4.38 | 224 | 100 | 12.30 | 33.38 | 5.50 | 25.30 | 269 | 0.34 |
| 164 | 9.44 | 33.86 | 3.22 | 185 | 150 | 9.52 | 33.72 | 3.68 | 26.05 | 196 | 0.45 |
| 201 | 9.56 | 34.14 | 1.99 | 166 | 200 | 9.55 | 34.14 | 2.08 | 26.38 | 166 | 0.55 |
| 231 | 9.58 | 34.33 | 1.13 | 152 | 250 | 9.52 | 34.37 | 0.90 | 26.56 | 148 | 0.63 |
| 302 | 8.84 | 34.40 | 0.66 | 136 | 300 | 8.91 | 34.40 | 0.67 | 26.68 | 137 | 0.70 |
| 369 | 7.66 | 34.33 | 0.65 | 124 | 400 | 7.44 | 34.33 | 0.58 | 26.85 | 121 | 0.84 |
| 436 | 7.22 | 34.34 | 0.44 | 117 | 500 | 6.80 | 34.38 | 0.30 | 26.98 | 109 | 0.96 |
| 568 | 6.35 | 34.40 | 0.24 | 101 | 600 | 6.13 | 34.40 | 0.22 | 27.08 | 99 | 1.07 |
| 704 | 5.40 | 34.40 | 0.20 | 90 | 700 | 5.43 | 34.40 | 0.20 | 27.17 | 90 | 1.17 |
| 871a) | 4.55 | 34.43 | 0.64 | 79 | 800 | 4.87 | 34.41 | 0.42 | 27.24 | 84 | 1.27 |

a) Because of malfunctioning of the unprotected thermometer, the depth of the last Nansen bottle was determined from an extrapolated depth curve.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **123.60** | CREST; June 13, 1952; 2140 GCT; 26°38'N, 116°10'W; sounding, 2200 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°. | | | | | | | | | | |
| 0 | 17.42 | 33.39 | 5.68 | 373 | 0 | 17.42 | 33.39 | 5.68 | 24.20 | 373 | 0.00 |
| 8 | 17.40 | 33.37 | 5.56 | 374 | 10 | 17.39 | 33.37 | 5.58 | 24.19 | 374 | 0.04 |
| 17 | 17.36 | 33.37 | 5.63 | 373 | 20 | 17.33 | 33.37 | 5.70 | 24.21 | 372 | 0.07 |
| 31 | 17.33 | 33.40 | 5.86 | 370 | 30 | 17.32 | 33.40 | 5.84 | 24.23 | 370 | 0.11 |
| 48 | 17.30 | 33.68 | 5.63 | 349 | 50 | 17.28 | 33.68 | 5.62 | 24.46 | 348 | 0.18 |
| 60 | 16.18 | 33.55 | 5.96 | 334 | 75 | 14.96 | 33.46 | 5.95 | 24.81 | 314 | 0.27 |
| 71 | 15.13 | 33.46 | 5.96 | 318 | 100 | 13.40 | 33.63 | 4.18 | 25.27 | 271 | 0.34 |
| 89 | 14.44 | 33.53 | 5.79 | 299 | 150 | 10.42 | 33.72 | 3.39 | 25.90 | 211 | 0.46 |
| 113 | 12.13 | 33.64 | 4.00 | 246 | 200 | 9.93 | 34.26 | 1.93 | 26.41 | 163 | 0.56 |
| 128 | 11.14 | 33.64 | 3.87 | 229 | 250 | 9.61 | 34.31 | 1.18 | 26.50 | 154 | 0.64 |
| 169 | 10.13 | 33.98 | 2.76 | 187 | 300 | 8.81 | 34.35 | 0.84 | 26.66 | 139 | 0.72 |
| 214 | 9.88 | 34.29 | 1.65 | 160 | 400 | 7.59 | 34.36 | 0.62 | 26.85 | 121 | 0.85 |
| 257 | 9.52 | 34.31 | 1.11 | 153 | 500 | 6.69 | 34.35 | 0.42 | 26.97 | 109 | 0.97 |
| 348 | 8.09 | 34.38 | 0.69 | 126 | | | | | | | |
| 447 | 7.18 | 34.34 | 0.57 | 117 | | | | | | | |
| 551 | 6.24 | 34.36 | 0.26 | 103 | | | | | | | |
| **127.34** | CREST; June 12, 1952; 0649, 0710 GCT; 26°55.5'N, 114°06'W; sounding, 40 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°, missing. | | | | | | | | | | |
| 0 | 13.15 | 33.71 | 5.39 | 260 | 0 | 13.15 | 33.71 | 5.39 | 25.38 | 260 | 0.00 |
| 10 | 13.15 | 33.69 | 5.55 | 262 | 10 | 13.15 | 33.69 | 5.55 | 25.37 | 262 | 0.03 |
| 20 | 13.09 | 33.71 | 5.30 | 259 | 20 | 13.09 | 33.71 | 5.30 | 25.40 | 259 | 0.05 |
| | | | | | 30 | 13.06 | 33.72 | 5.20 | 25.41 | 258 | 0.08 |
| 40 | 12.89 | 33.73 | 5.09 | 254 | 50 | 11.79 | 33.71 | 4.16 | 25.65 | 235 | 0.13 |
| 50 | 11.79 | 33.71 | 4.16 | 235 | | | | | | | |
| **127.40** | CREST; June 12, 1952; 0300 GCT; 26°40'N, 114°31'W; sounding, 1700 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 40°. | | | | | | | | | | |
| 0 | 16.89 | 33.51 | 5.70 | 352 | 0 | 16.89 | 33.51 | 5.70 | 24.42 | 352 | 0.00 |
| 8 | 16.89 | 33.51 | 5.83 | 352 | 10 | 16.87 | 33.51 | 5.85 | 24.42 | 352 | 0.04 |
| 15 | 16.87 | 33.56 | 5.89 | 348 | 20 | 16.87 | 33.57 | 5.86 | 24.47 | 347 | 0.07 |
| 27 | 16.59 | 33.57 | 5.73 | 341 | 30 | 15.80 | 33.58 | 5.66 | 24.72 | 323 | 0.10 |
| 41 | 13.03 | 33.60 | 4.66 | 266 | 50 | 11.61 | 33.65 | 4.10 | 25.63 | 236 | 0.16 |
| 52 | 11.44 | 33.68 | 3.69 | 231 | 75 | 10.73 | 33.88 | 2.92 | 25.97 | 204 | 0.22 |
| 60 | 11.07 | 33.75 | 3.27 | 220 | 100 | 10.54 | 34.09 | 2.22 | 26.17 | 186 | 0.26 |
| 76 | 10.71 | 33.89 | 2.92 | 203 | 150 | 10.42 | 34.39 | 1.20 | 26.42 | 161 | 0.35 |
| 97 | 10.58 | 34.07 | 2.29 | 188 | 200 | 10.30 | 34.57 | 0.42 | 26.58 | 146 | 0.43 |
| 108 | 10.50 | 34.14 | 2.06 | 181 | 250 | 9.81 | 34.55 | 0.38 | 26.65 | 140 | 0.51 |
| 142 | 10.44 | 34.36 | 1.34 | 164 | 300 | 9.08 | 34.51 | 0.34 | 26.74 | 131 | 0.58 |
| 179 | 10.31 | 34.49 | 0.73 | 152 | 400 | 7.93 | 34.47 | 0.24 | 26.89 | 117 | 0.71 |
| 209 | 10.28 | 34.58 | 0.39 | 145 | | | | | | | |
| 280 | 9.31 | 34.52 | 0.38 | 134 | | | | | | | |
| 353 | 8.51 | 34.49 | 0.24 | 124 | | | | | | | |
| 445 | 7.47 | 34.45 | 0.24 | 112 | | | | | | | |
| **127.50** | CREST; June 11, 1952; 2059 GCT; 26°24'N, 115°08'W; sounding, 1800 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 30°. | | | | | | | | | | |
| 0 | 17.81 | 33.46 | 5.52 | 377 | 0 | 17.81 | 33.46 | 5.52 | 24.16 | 377 | 0.00 |
| 8 | 17.78 | 33.46 | 5.56 | 376 | 10 | 17.77 | 33.46 | 5.57 | 24.17 | 376 | 0.04 |
| 17 | 17.75 | 33.46 | 5.61 | 375 | 20 | 17.73 | 33.46 | 5.60 | 24.18 | 375 | 0.08 |
| 30 | 17.69 | 33.46 | 5.52 | 374 | 30 | 17.69 | 33.46 | 5.52 | 24.19 | 374 | 0.11 |
| 47 | 16.67 | 33.49 | 5.82 | 349 | 50 | 16.50 | 33.51 | 5.82 | 24.51 | 343 | 0.18 |
| 60 | 15.86 | 33.55 | 5.82 | 327 | 75 | 15.15 | 33.44 | 5.80 | 24.76 | 320 | 0.27 |
| 71 | 15.38 | 33.48 | 5.81 | 322 | 100 | 13.45 | 33.46 | 5.40 | 25.13 | 284 | 0.34 |
| 88 | 14.43 | 33.35 | 5.79 | 312 | 150 | 10.67 | 33.92 | 2.62 | 26.01 | 200 | 0.47 |
| 111 | 12.51 | 33.53 | 4.68 | 261 | 200 | 9.11 | 34.09 | 2.76 | 26.41 | 163 | 0.56 |
| 125 | 11.19 | 33.55 | 4.08 | 236 | 250 | 9.13 | 34.26 | 1.45 | 26.54 | 150 | 0.64 |
| 162 | 10.41 | 34.00 | 2.46 | 190 | 300 | 8.68 | 34.30 | 0.89 | 26.64 | 141 | 0.72 |
| 205 | 9.09 | 34.11 | 2.77 | 161 | 400 | 7.60 | 34.39 | 0.43 | 26.87 | 119 | 0.85 |
| 243 | 9.14 | 34.25 | 1.56 | 151 | 500 | 6.72 | 34.40 | 0.33 | 27.01 | 106 | 0.97 |
| 332 | 8.23 | 34.33 | 0.67 | 132 | | | | | | | |
| 428 | 7.34 | 34.40 | 0.39 | 114 | | | | | | | |
| 529 | 6.52 | 34.40 | 0.34 | 104 | | | | | | | |

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5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; June 11, 1952; 1354 GCT; 26°01'N, 115°51.5'W; sounding, 2200 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 22°. 127.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.03 | 33.63 | 5.50 | 369 | 0 | 18.03 | 33.63 | 5.50 | 24.24 | 369 | 0.00 |
| 9 | 18.04 | 33.62 | 5.48 | 370 | 10 | 18.03 | 33.62 | 5.48 | 24.23 | 370 | 0.04 |
| 18 | 18.01 | 33.62 | 5.53 | 370 | 20 | 18.01 | 33.62 | 5.53 | 24.23 | 370 | 0.07 |
| 32 | 18.02 | 33.62 | 5.46 | 370 | 30 | 18.01 | 33.62 | 5.47 | 24.23 | 370 | 0.11 |
| 50 | 16.51 | 33.48 | 5.81 | 346 | 50 | 16.51 | 33.48 | 5.81 | 24.48 | 346 | 0.18 |
| 63 | 15.87 | 33.57 | 5.80 | 825 | 75 | 15.18 | 33.48 | 5.79 | 24.78 | 317 | 0.27 |
| 75 | 15.18 | 33.48 | 5.79 | 317 | 100 | 13.42 | 33.50 | 5.08 | 25.17 | 281 | 0.34 |
| 96 | 13.84 | 33.49 | 5.28 | 290 | 150 | 10.97 | 34.04 | 2.34 | 26.05 | 196 | 0.46 |
| 124 | 11.67 | 33.71 | 3.76 | 233 | 200 | 10.94 | 34.32 | 1.27 | 26.28 | 175 | 0.56 |
| 142 | 10.96 | 33.91 | 2.76 | 206 | 250 | 10.09 | 34.37 | 1.05 | 26.46 | 157 | 0.64 |
| 187 | 11.06 | 34.31 | 1.35 | 178 | 300 | 9.68 | 34.42 | 0.70 | 26.57 | 147 | 0.72 |
| 238 | 10.20 | 34.34 | 1.12 | 161 | 400 | 8.19 | 34.42 | 0.34 | 26.81 | 125 | 0.86 |
| 281 | 9.85 | 34.42 | 0.82 | 150 | 500 | 7.01 | 34.40 | 0.31 | 26.97 | 110 | 0.99 |
| 381 | 8.40 | 34.42 | 0.37 | 128 | 600 | (6.06) | (34.40) | | (27.09) | (98) | (1.10) |
| 481 | 7.21 | 34.40 | 0.32 | 113 | | | | | | | |
| 589 | 6.14 | 34.40 | 0.23 | 99 | | | | | | | |

CREST; June 10, 1952; 1026 GCT; 26°28'N, 113°29'W; sounding, 50 fm; wind, 330°, force 4; weather, clear; sea, moderate; wire angle, 00°. 130.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.72 | 33.66 | 5.49 | 275 | 0 | 13.72 | 33.66 | 5.49 | 25.23 | 275 | 0.00 |
| 10 | 13.62 | 33.64 | 5.45 | 274 | 10 | 13.62 | 33.64 | 5.45 | 25.24 | 274 | 0.03 |
| 20 | 13.44 | 33.64 | 5.28 | 271 | 20 | 13.44 | 33.64 | 5.28 | 25.27 | 271 | 0.05 |
| 30 | 12.29 | 33.58 | 4.54 | 254 | 30 | 12.29 | 33.58 | 4.54 | 25.45 | 254 | 0.08 |
| 50 | 11.20 | 33.82 | 3.18 | 217 | 50 | 11.20 | 33.82 | 3.18 | 25.84 | 217 | 0.13 |

CREST; June 10, 1952; 1325 GCT; 26°19'N, 113°48.5'W; sounding, 350 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°. 130.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.21 | 33.49 | | 339 | 0 | 16.21 | 33.49 | | 24.56 | 339 | 0.00 |
| 8 | 16.20 | 33.48 | | 339 | 10 | 16.20 | 33.48 | | 24.55 | 339 | 0.03 |
| 18 | 16.18 | 33.51 | | 336 | 20 | 16.16 | 33.52 | | 24.59 | 335 | 0.07 |
| 35 | 13.50 | 33.62 | | 273 | 30 | 14.54 | 33.61 | | 25.02 | 295 | 0.10 |
| 56 | 11.26 | 33.58 | | 235 | 50 | 11.29 | 33.59 | | 25.65 | 235 | 0.15 |
| 81 | 11.40 | 33.96 | | 210 | 75 | 11.35 | 33.83 | | 25.82 | 219 | 0.21 |
| 123 | 11.50 | 34.45 | | 175 | 100 | 11.48 | 34.24 | | 26.12 | 191 | 0.26 |
| 166 | 11.12 | 34.63 | | 156 | 150 | 11.30 | 34.58 | | 26.41 | 162 | 0.35 |
| 209 | 10.69 | 34.65 | | 147 | 200 | 10.80 | 34.65 | | 26.56 | 149 | 0.43 |
| 301 | 9.48 | 34.56 | | 134 | 250 | 10.13 | 34.60 | | 26.64 | 141 | 0.51 |
| 394 | 8.59 | 34.57 | | 119 | 300 | 9.51 | 34.56 | | 26.71 | 134 | 0.58 |
| 497 | 7.44 | 34.47 | | 110 | 400 | 8.51 | 34.57 | | 26.88 | 118 | 0.71 |
| | | | | | 500 | (7.41) | (34.47) | | (26.96) | (110) | (0.83) |

CREST; June 10, 1952; 1655 GCT; 26°09'N, 114°05'W; sounding, 1300 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°. 130.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.82 | 33.58 | | 345 | 0 | 16.82 | 33.58 | | 24.49 | 345 | 0.00 |
| 8 | 16.81 | 33.58 | | 345 | 10 | 16.80 | 33.58 | | 24.49 | 345 | 0.03 |
| 22 | 16.76 | 33.57 | | 345 | 20 | 16.78 | 33.57 | | 24.49 | 345 | 0.07 |
| 44 | 15.29 | 33.58 | | 312 | 30 | 16.72 | 33.57 | | 24.50 | 344 | 0.10 |
| 66 | 11.57 | 33.65 | | 236 | 50 | 14.26 | 33.59 | | 25.06 | 291 | 0.17 |
| 88 | 11.08 | 33.86 | | 212 | 75 | 11.23 | 33.71 | | 25.75 | 225 | 0.23 |
| 134 | 10.59 | 34.22 | | 177 | 100 | 10.92 | 34.01 | | 26.04 | 198 | 0.29 |
| 174 | 10.15 | 34.38 | | 158 | 150 | 10.38 | 34.29 | | 26.35 | 168 | 0.38 |
| 215 | 9.94 | 34.49 | | 146 | 200 | 10.00 | 34.47 | | 26.56 | 149 | 0.46 |
| 255 | 9.14 | 34.43 | | 138 | 250 | 9.24 | 34.43 | | 26.65 | 140 | 0.53 |
| 341 | 8.24 | 34.47 | | 122 | 300 | 8.66 | 34.45 | | 26.76 | 129 | 0.60 |
| 422 | 7.47 | 34.47 | | 111 | 400 | 7.63 | 34.47 | | 26.93 | 113 | 0.73 |
| 509 | 6.80 | 34.47 | | 102 | 500 | 6.87 | 34.47 | | 27.04 | 103 | 0.85 |
| 682 | 5.69 | 34.47 | | 88 | 600 | 6.19 | 34.47 | | 27.13 | 94 | 0.95 |
| 858 | 4.78 | 34.51 | | 75 | 700 | 5.60 | 34.47 | | 27.21 | 87 | 1.05 |
| 1054 | 4.07 | 34.54 | | 65 | 800 | 5.07 | 34.49 | | 27.28 | 80 | 1.14 |
| | | | | | 1000 | 4.20 | 34.53 | | 27.41 | 68 | 1.31 |

S10

CCOFI 5206

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 130.50 | CREST; June 10, 1952; 2358 GCT; 25°49'N, 114°46'W; sounding, 2000 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 33°. | | | | | | | | | | |
| 0 | 17.44 | 33.49 | 5.56 | 366 | 0 | 17.44 | 33.49 | 5.56 | 24.27 | 366 | 0.00 |
| 8 | 17.45 | 33.49 | 5.55 | 366 | 10 | 17.43 | 33.49 | 5.56 | 24.27 | 366 | 0.04 |
| 17 | 17.42 | 33.51 | 5.58 | 364 | 20 | 17.41 | 33.51 | 5.58 | 24.29 | 364 | 0.07 |
| 29 | 17.41 | 33.49 | 5.60 | 365 | 30 | 17.41 | 33.49 | 5.61 | 24.28 | 365 | 0.11 |
| 42 | 17.30 | 33.60 | 5.74 | 355 | 50 | 16.12 | 33.59 | 5.89 | 24.66 | 329 | 0.18 |
| 54 | 15.90 | 33.57 | 5.92 | 326 | 75 | 15.25 | 33.46 | 5.91 | 24.75 | 320 | 0.26 |
| 66 | 15.62 | 33.53 | 5.74 | 323 | 100 | 13.40 | 33.46 | 5.19 | 25.14 | 283 | 0.34 |
| 79 | 15.06 | 33.46 | 5.92 | 316 | 150 | 10.86 | 33.93 | 2.86 | 25.99 | 203 | 0.46 |
| 96 | 13.83 | 33.46 | 5.32 | 292 | 200 | 9.93 | 34.25 | 1.68 | 26.40 | 164 | 0.55 |
| 116 | 12.22 | 33.49 | 4.68 | 259 | 250 | 9.40 | 34.37 | 1.03 | 26.58 | 146 | 0.63 |
| 150 | 10.86 | 33.93 | 2.86 | 203 | 300 | 9.03 | 34.43 | 0.50 | 26.69 | 136 | 0.71 |
| 186 | 10.28 | 34.20 | 1.91 | 173 | 400 | 7.94 | 34.42 | 0.36 | 26.85 | 121 | 0.84 |
| 223 | 9.60 | 34.31 | 1.38 | 154 | 500 | (7.00) | (34.45) | (0.26) | (27.01) | (106) | (0.96) |
| 306 | 8.96 | 34.43 | 0.47 | 135 | | | | | | | |
| 392 | 8.02 | 34.42 | 0.36 | 122 | | | | | | | |
| 490 | 7.08 | 34.45 | 0.26 | 107 | | | | | | | |
| 130.60 | CREST; June 11, 1952; 0630 GCT; 25°28.5'N, 115°24'W; sounding, 2200 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 28°. | | | | | | | | | | |
| 0 | 18.07 | 33.69 | 5.53 | 366 | 0 | 18.07 | 33.69 | 5.53 | 24.27 | 366 | 0.00 |
| 8 | 18.08 | 33.68 | 5.44 | 367 | 10 | 18.07 | 33.68 | 5.45 | 24.27 | 367 | 0.04 |
| 22 | 18.07 | 33.71 | 5.56 | 364 | 20 | 18.06 | 33.71 | 5.54 | 24.29 | 364 | 0.07 |
| 48 | 17.03 | 33.57 | 5.72 | 351 | 30 | 18.05 | 33.71 | 5.62 | 24.29 | 364 | 0.11 |
| 70 | 16.04 | 33.87 | 5.58 | 307 | 50 | 16.98 | 33.57 | 5.72 | 24.44 | 350 | 0.18 |
| 96 | 13.75 | 33.71 | 4.42 | 272 | 75 | 15.60 | 33.87 | 5.48 | 24.99 | 298 | 0.26 |
| 143 | 10.98 | 33.91 | 3.13 | 206 | 100 | 13.26 | 33.71 | 4.23 | 25.36 | 262 | 0.33 |
| 187 | 9.74 | 34.11 | 2.61 | 171 | 150 | 10.71 | 33.95 | 3.05 | 26.03 | 199 | 0.45 |
| 238 | 9.19 | 34.25 | 1.81 | 152 | 200 | 9.49 | 34.14 | 2.42 | 26.39 | 165 | 0.54 |
| 280 | 9.22 | 34.42 | 0.88 | 140 | 250 | 9.18 | 34.31 | 1.57 | 26.57 | 148 | 0.62 |
| 376 | 8.33 | 34.49 | 0.34 | 121 | 300 | 9.20 | 34.45 | 0.70 | 26.68 | 137 | 0.70 |
| 470 | 7.40 | 34.49 | 0.20 | 108 | 400 | 8.10 | 34.49 | 0.28 | 26.88 | 118 | 0.83 |
| 562 | 6.50 | 34.49 | 0.26 | 97 | 500 | 7.09 | 34.49 | 0.21 | 27.03 | 104 | 0.95 |
| 752 | 5.25 | 34.52 | 0.31 | 79 | 600 | 6.20 | 34.49 | 0.30 | 27.15 | 93 | 1.06 |
| 949 | 4.34 | 34.51 | 0.46 | 70 | 700 | 5.53 | 34.51 | 0.31 | 27.25 | 83 | 1.15 |
| 1147 | 3.78 | 34.52 | 0.62 | 64 | 800 | 5.01 | 34.52 | 0.32 | 27.32 | 77 | 1.24 |
| | | | | | 1000 | 4.17 | 34.51 | 0.50 | 27.40 | 69 | 1.41 |
| 133.25 | CREST; June 10, 1952; 0131 GCT; 26°01'N, 112°48.5'W; sounding, 45 fm; wind, 290°, force 5; weather, clear; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 14.45 | 34.09 | 4.50 | 258 | 0 | 14.45 | 34.09 | 4.50 | 25.41 | 258 | 0.00 |
| 10 | 14.46 | 34.05 | 4.39 | 261 | 10 | 14.46 | 34.05 | 4.39 | 25.38 | 261 | 0.03 |
| 20 | 14.14 | 34.05 | 3.92 | 254 | 20 | 14.14 | 34.05 | 3.92 | 25.44 | 254 | 0.05 |
| 29 | 12.50 | 34.13 | 0.70 | 217 | 30 | 12.50 | 34.14 | 0.65 | 25.84 | 216 | 0.08 |
| 49 | 12.12 | 34.23 | 0.33 | 203 | 50 | (12.10) | (34.23) | (0.33) | (25.99) | (202) | (0.12) |
| 133.30 | CREST; June 9, 1952; 2025, 2043 GCT; 25°51.5'N, 113°06'W; sounding, 100 fm; wind, 300°, force 5; weather, clear; sea, rough; wire angle, 08°, 08°. | | | | | | | | | | |
| 0 | 17.54 | 33.71 | 5.58 | 352 | 0 | 17.54 | 33.71 | 5.58 | 24.42 | 352 | 0.00 |
| 10 | 16.58 | 33.76 | 5.27 | 327 | 10 | 16.58 | 33.76 | 5.27 | 24.68 | 327 | 0.03 |
| 24 | 12.87 | 33.69 | 3.88 | 256 | 20 | 13.80 | 33.70 | 4.28 | 25.24 | 273 | 0.06 |
| 48 | 11.83 | 34.02 | 2.03 | 213 | 30 | 12.20 | 33.70 | 3.25 | 25.56 | 243 | 0.09 |
| 70 | 11.68 | 34.23 | 1.18 | 195 | 50 | 11.82 | 34.05 | 1.92 | 25.91 | 211 | 0.14 |
| | | | | | 75 | 11.62 | 34.26 | 1.04 | 26.11 | 192 | 0.19 |
| 92 | 11.56 | 34.36 | 0.74 | 183 | 100 | 11.55 | 34.43 | 0.45 | 26.25 | 178 | 0.23 |
| 114 | 11.58 | 34.52 | 0.30 | 172 | 150 | (11.34) | (34.61) | (0.47) | (26.43) | (161) | (0.32) |
| 143 | 11.41 | 34.60 | 0.47 | 163 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| CREST; June 9, 1952; 1612 GCT; 25°30'N, 113°50'W; sounding, 1800 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 27°. | | | | | | | | | | | 133.40 |
| 0 | 16.62 | 33.51 | 5.70 | 346 | 0 | 16.62 | 33.51 | 5.70 | 24.48 | 346 | 0.00 |
| 8 | 16.62 | 33.49 | 5.71 | 348 | 10 | 16.62 | 33.49 | 5.71 | 24.47 | 348 | 0.03 |
| 18 | 16.61 | 33.51 | 5.73 | 346 | 20 | 16.60 | 33.51 | 5.73 | 24.49 | 346 | 0.07 |
| 31 | 16.53 | 33.51 | 5.67 | 344 | 30 | 16.53 | 33.51 | 5.67 | 24.50 | 344 | 0.10 |
| 49 | 15.46 | 33.39 | 5.93 | 330 | 50 | 15.35 | 33.39 | 5.93 | 24.68 | 328 | 0.17 |
| 62 | 14.50 | 33.39 | - | 310 | 75 | 12.92 | 33.46 | 4.95 | 25.24 | 274 | 0.25 |
| 74 | 12.97 | 33.46 | 4.98 | 275 | 100 | 11.05 | 33.75 | 3.47 | 25.81 | 219 | 0.31 |
| 94 | 11.15 | 33.49 | 3.97 | 240 | 150 | 10.52 | 34.05 | 2.17 | 26.14 | 188 | 0.41 |
| 120 | 10.86 | 33.93 | 2.68 | 203 | 200 | 10.50 | 34.50 | 0.84 | 26.49 | 155 | 0.50 |
| 134 | 10.54 | 33.98 | 2.68 | 194 | 250 | 9.98 | 34.52 | 0.55 | 26.60 | 145 | 0.58 |
| 172 | 10.56 | 34.31 | 1.26 | 170 | 300 | 9.39 | 34.51 | 0.29 | 26.69 | 136 | 0.65 |
| 214 | 10.39 | 34.52 | 0.72 | 151 | 400 | 8.27 | 34.49 | 0.26 | 26.85 | 121 | 0.79 |
| 252 | 9.94 | 34.52 | 0.54 | 144 | 500 | 7.06 | 34.46 | 0.32 | 27.01 | 106 | 0.91 |
| 344 | 8.85 | 34.49 | 0.18 | 129 | | | | | | | |
| 441 | 7.82 | 34.49 | 0.35 | 114 | | | | | | | |
| 545 | 6.54 | 34.42 | 0.28 | 102 | | | | | | | |
| CREST; June 9, 1952; 0935 GCT; 25°14.5'N, 114°24.5'W; sounding, 2050 fm; wind, 340°, force 6; weather, partly cloudy; sea, very rough; wire angle, 25°. | | | | | | | | | | | 133.50 |
| 0 | 17.41 | 33.46 | 5.65 | 367 | 0 | 17.41 | 33.46 | 5.65 | 24.26 | 367 | 0.00 |
| 8 | 17.42 | 33.46 | 5.55 | 368 | 10 | 17.41 | 33.46 | 5.53 | 24.26 | 367 | 0.04 |
| 18 | 17.41 | 33.48 | 5.50 | 366 | 20 | 17.40 | 33.48 | 5.50 | 24.27 | 366 | 0.07 |
| 32 | 17.41 | 33.48 | 5.52 | 366 | 30 | 17.40 | 33.48 | 5.51 | 24.27 | 366 | 0.11 |
| 49 | 16.37 | - | 5.74 | | 50 | 16.21 | 33.49 | 5.74 | 24.56 | 339 | 0.18 |
| 62 | 15.78 | - | - | | 75 | 14.85 | 33.40 | 5.75 | 24.79 | 316 | 0.26 |
| 75 | 14.85 | 33.40 | 5.75 | 316 | 100 | 14.92 | 33.85 | 4.36 | 25.12 | 285 | 0.34 |
| 95 | 14.96 | 33.86 | 4.72 | 285 | 150 | 11.73 | 34.02 | 3.31 | 25.90 | 211 | 0.46 |
| 123 | 12.48 | 33.77 | 3.62 | 243 | 200 | 11.23 | 34.49 | 2.00 | 26.36 | 168 | 0.56 |
| 139 | 11.94 | 33.90 | - | 224 | 250 | 10.63 | 34.55 | 0.71 | 26.51 | 153 | 0.64 |
| 182 | 11.38 | 34.34 | 2.97 | 181 | 300 | 9.87 | 34.49 | 0.76 | 26.60 | 145 | 0.72 |
| 232 | 10.94 | 34.56 | 0.62 | 158 | 400 | 8.43 | 34.45 | 0.54 | 26.80 | 126 | 0.86 |
| 273 | 10.26 | 34.52 | 0.78 | 149 | 500 | 7.22 | 34.47 | 0.45 | 26.99 | 107 | 0.99 |
| 372 | 8.8 a) | 34.45 | 0.60 | 131 | | | | | | | |
| 474 | 7.52 | 34.47 | 0.44 | 112 | | | | | | | |
| 578 | 6.54 | 34.45 | 0.58 | 100 | | | | | | | |
| CREST; June 8, 1952; 1059 GCT; 25°35'N, 112°19'W; sounding, 40 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 01°. | | | | | | | | | | | 137.23 |
| 0 | 17.30 | 33.80 | 5.79 | 340 | 0 | 17.30 | 33.80 | 5.79 | 24.54 | 340 | 0.00 |
| 10 | 17.08 | 33.84 | 5.68 | 332 | 10 | 17.08 | 33.84 | 5.68 | 24.63 | 332 | 0.03 |
| 20 | 12.31 | 33.77 | 3.02 | 240 | 20 | 12.31 | 33.77 | 3.02 | 25.60 | 240 | 0.06 |
| 30 | 12.32 | 34.02 | 1.71 | 222 | 30 | 12.32 | 34.02 | 1.71 | 25.79 | 222 | 0.09 |
| 50 | 12.89 | 34.34 | 0.27 | 209 | 50 | 12.89 | 34.34 | 0.27 | 25.92 | 209 | 0.13 |
| CREST; June 8, 1952; 1457, 1517 GCT; 25°20'N, 112°46'W; sounding, 135 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 14°, 16°. | | | | | | | | | | | 137.30 |
| 0 | 16.78 | 33.62 | 5.69 | 342 | 0 | 16.78 | 33.62 | 5.69 | 24.53 | 342 | 0.00 |
| 10 | 16.76 | - | 5.79 | | 10 | 16.76 | 33.63 | 5.79 | 24.54 | 340 | 0.03 |
| 24 | 16.50 | 33.64 | 5.76 | 334 | 20 | 16.62 | 33.64 | 5.78 | 24.58 | 337 | 0.07 |
| | | | | | 30 | 14.90 | 33.63 | 5.62 | 24.96 | 301 | 0.10 |
| 47 | 12.82 | 33.62 | 4.26 | 260 | 50 | 12.75 | 33.62 | 3.95 | 25.39 | 259 | 0.16 |
| 69 | 12.41 | 34.13 | 2.37 | 215 | 75 | 12.32 | 34.22 | 1.85 | 25.94 | 207 | 0.21 |
| 90 | 12.10 | 34.34 | 1.13 | 194 | 100 | 11.97 | 34.41 | 0.92 | 26.16 | 187 | 0.26 |
| 139 | 11.46 | - | - | | 150 | 11.33 | 34.62 | 0.44 | 26.44 | 160 | 0.35 |
| 177 | 11.05 | 34.65 | 0.34 | 153 | | | | | | | |

a) Temperature inferred from pressure thermometer and wire depth.

SIO

CCOFI
5206
5207

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

137.40 CREST; June 8, 1952; 2059 GCT; 25°00'N, 113°23'W; sounding, 1750 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.67 | 33.49 | 5.70 | 349 | 0 | 16.67 | 33.49 | 5.70 | 24.45 | 349 | 0.00 |
| 9 | 16.60 | 33.49 | 5.83 | 347 | 10 | 16.58 | 33.49 | 5.83 | 24.47 | 347 | 0.03 |
| 18 | 16.43 | 33.49 | 5.83 | 343 | 20 | 16.39 | 33.49 | 5.84 | 24.52 | 343 | 0.07 |
| 30 | 15.71 | 33.44 | 6.14 | 331 | 30 | 15.71 | 33.44 | 6.14 | 24.63 | 331 | 0.10 |
| 48 | 14.16 | 33.35 | 5.91 | 306 | 50 | 14.00 | 33.35 | 5.89 | 24.93 | 303 | 0.17 |
| 60 | 13.13 | 33.35 | 5.40 | 286 | 75 | 11.50 | 33.51 | 4.39 | 25.55 | 245 | 0.24 |
| 72 | 11.73 | 33.46 | 4.55 | 252 | 100 | 11.22 | 34.04 | 3.00 | 26.01 | 201 | 0.29 |
| 92 | 11.08 | 33.71 | 3.70 | 223 | 150 | 11.13 | 34.44 | 0.66 | 26.34 | 170 | 0.39 |
| 116 | 11.46 | 34.25 | 1.66 | 189 | 200 | 10.90 | 34.59 | 0.33 | 26.49 | 155 | 0.47 |
| 130 | 11.36 | 34.34 | 0.85 | 181 | | | | | | | |
| 168 | 11.00 | 34.52 | 0.56 | 162 | | | | | | | |
| 212 | 10.85 | 34.60 | 0.26 | 153 | | | | | | | |
| 438 | 7.74 | 34.45 | 0.14 | 116 | | | | | | | |
| 542 | 6.80 | 34.42 | 0.18 | 106 | | | | | | | |

137.50 CREST; June 9, 1952; 0252 GCT; 24°40'N, 114°01.5'W; sounding, 2200 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.38 | 33.49 | 5.55a) | 365 | 0 | 17.38 | 33.49 | 5.55 | 24.29 | 365 | 0.00 |
| 9 | 17.38 | 33.48 | 5.47 | 365 | 10 | 17.37 | 33.48 | 5.46 | 24.28 | 365 | 0.04 |
| 19 | 17.36 | 33.46 | 5.41 | 366 | 20 | 17.36 | 33.46 | 5.41 | 24.27 | 366 | 0.07 |
| 33 | 17.39 | 33.48 | 5.53 | 366 | 30 | 17.38 | 33.47 | 5.48 | 24.27 | 366 | 0.11 |
| 53 | 16.48 | 33.49 | 5.73 | 344 | 50 | 16.79 | 33.49 | 5.71 | 24.43 | 351 | 0.18 |
| 67 | 14.36 | - | 5.67 | | 75 | 13.70 | 33.49 | 5.35 | 25.10 | 287 | 0.26 |
| 80 | 13.86 | - | 5.14 | | 100 | 12.80 | 33.49 | 3.39 | 25.28 | 270 | 0.33 |
| 105 | 12.61 | 33.49 | 3.17 | 266 | 150 | 11.62 | 34.00 | 1.40 | 25.90 | 211 | 0.45 |
| 137 | 11.68 | 33.77 | 2.11 | 229 | 200 | 11.17 | (34.42) | 0.78 | (26.31) | (172) | (0.55) |
| 155 | 11.62 | 34.05 | 1.22 | 207 | 250 | 10.18 | (34.47) | 0.55 | (26.53) | (152) | (0.63) |
| 205 | 11.06 | - | - | | 300 | 9.50 | (34.52) | 0.29 | (26.68) | (137) | (0.71) |
| 259 | 10.02 | - | 0.50 | | 400 | 8.31 | 34.47 | 0.18 | 26.83 | 123 | (0.85) |
| 304 | 9.44 | 34.52 | 0.28 | 136 | 500 | 7.22 | 34.47 | 0.16 | 26.99 | 107 | (0.97) |
| 411 | 8.19 | 34.47 | 0.18 | 121 | 600 | 6.27 | 34.46 | 0.16 | 27.11 | 96 | (1.08) |
| 516 | 7.06 | 34.47 | 0.16 | 105 | | | | | | | |
| 624 | 6.06 | 34.45 | 0.16 | 94 | | | | | | | |

40.38 CREST; July 14, 1952; 2227 GCT; 41°45.5'N, 124°26.5'W; sounding, 78 fm; wind, 340°, force 4; weather, overcast; sea, moderate; wire angle, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.66 | 32.94 | 6.53 | 308 | 0 | 12.66 | 32.94 | 6.53 | 24.89 | 308 | 0.00 |
| 10 | 11.93 | 33.02 | 6.36 | 288 | 10 | 11.93 | 33.02 | 6.36 | 25.09 | 288 | 0.03 |
| 20 | 10.90 | 33.10 | 5.99 | 265 | 20 | 10.90 | 33.10 | 5.99 | 25.34 | 265 | 0.06 |
| 29 | 9.52 | 33.12 | 5.38 | 241 | 30 | 9.40 | 33.12 | 5.30 | 25.61 | 239 | 0.08 |
| 48 | 8.24 | 33.39 | 4.30 | 202 | 50 | 8.15 | 33.65 | 4.12 | 26.21 | 181 | 0.12 |
| 73 | 7.59 | 33.86 | 2.94 | 158 | 75 | 7.55 | 33.86 | 2.91 | 26.47 | 157 | 0.17 |
| 97 | 7.51 | 33.85 | 2.86 | 158 | 100 | (7.50) | (33.85) | (2.84) | (26.47) | (157) | (0.21) |

40.40 CREST; July 14, 1952; 2101 GCT; 41°42'N, 124°34.5'W; sounding, 320 fm; wind, 340°, force 4; weather, overcast; sea, moderate; wire angle, 36°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.65 | 32.90 | 6.54 | 310 | 0 | 12.65 | 32.90 | 6.54 | 24.86 | 310 | 0.00 |
| 8 | 12.45 | 32.84 | 6.58 | 311 | 10 | 12.23 | 32.84 | 6.57 | 24.89 | 307 | 0.03 |
| 20 | 11.15 | - | 6.40 | | 20 | 11.15 | 32.86 | 6.40 | 25.11 | 287 | 0.06 |
| 40 | 9.26 | 33.14 | 5.35 | 235 | 30 | 11.13 | 32.95 | 5.83 | 25.18 | 280 | 0.09 |
| 60 | 8.28 | 33.34 | 4.41 | 206 | 50 | 8.60 | 33.24 | 4.85 | 25.82 | 218 | 0.14 |
| 80 | 8.10 | 33.54 | 4.08 | 189 | 75 | 8.16 | 33.50 | 4.14 | 26.09 | 193 | 0.19 |
| 117 | 7.48 | 33.82 | 3.22 | 159 | 100 | 7.67 | 33.71 | 3.56 | 26.33 | 170 | 0.24 |
| 153 | 7.34 | 33.95 | 2.60 | 148 | 150 | 7.35 | 33.95 | 2.66 | 26.56 | 148 | 0.32 |
| 190 | 7.14 | 33.98 | 2.16 | 143 | 200 | 7.09 | 33.99 | 2.12 | 26.63 | 142 | 0.39 |
| 228 | 6.94 | 34.02 | 2.05 | 137 | 250 | 6.80 | 34.04 | 1.87 | 26.71 | 134 | 0.46 |
| 273 | 6.67 | 34.05 | 1.66 | 132 | 300 | 6.54 | 34.09 | 1.55 | 26.79 | 127 | 0.53 |
| 316 | 6.50 | 34.11 | 1.52 | 125 | 400 | 6.07 | 34.14 | 1.04 | 26.89 | 117 | 0.66 |
| 360 | 6.35 | 34.12 | 1.18 | 122 | | | | | | | |
| 407 | 6.04 | 34.14 | 1.03 | 117 | | | | | | | |



a) The Nansen bottles were allowed to stand for sometime before oxygen samples were drawn.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; July 14, 1952; 1503 GCT; 41°21'N, 125°22'W; sounding, 1750 fm; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 20°. | | | | | | | | | | | 40.50 |
| 0 | 13.46 | 32.66 | 6.20 | 343 | 0 | 13.46 | 32.66 | 6.20 | 24.51 | 343 | 0.00 |
| 9 | 13.38 | 32.79 | 6.28 | 332 | 10 | 13.28 | 32.82 | 6.31 | 24.67 | 328 | 0.03 |
| 23 | 12.28 | 32.95 | 6.69 | 300 | 20 | 12.52 | 32.94 | 6.68 | 24.91 | 305 | 0.07 |
| 52 | - | 32.97 | 5.43 | | 30 | 12.17 | 32.96 | 6.62 | 25.00 | 297 | 0.10 |
| 74 | 8.13 | 33.31 | 4.21 | 206 | 50 | 9.45 | 32.97 | 5.52 | 25.48 | 251 | 0.15 |
| 100 | 7.78 | 33.58 | 3.69 | 181 | 75 | 8.11 | 33.33 | 4.20 | 25.97 | 205 | 0.21 |
| 148 | 7.29 | 33.93 | 3.06 | 149 | 100 | 7.78 | 33.58 | 3.69 | 26.21 | 181 | 0.26 |
| 194 | 6.96 | 33.90 | 2.24 | 147 | 150 | 7.27 | 33.93 | 3.01 | 26.56 | 148 | 0.34 |
| 246 | 6.47 | 33.93 | 1.71 | 138 | 200 | 6.90 | 33.90 | 2.16 | 26.59 | 146 | 0.41 |
| 288 | 6.10 | 34.00 | 1.38 | 128 | 250 | 6.43 | 33.93 | 1.67 | 26.67 | 138 | 0.49 |
| 390 | 5.33 | 34.09 | 1.00 | 113 | 300 | 5.99 | 34.02 | 1.30 | 26.80 | 125 | 0.55 |
| 484 | 4.84 | 34.16 | 0.76 | 102 | 400 | 5.27 | 34.10 | 0.98 | 26.95 | 111 | 0.68 |
| 579 | 4.50 | 34.20 | 0.58 | 95 | 500 | 4.76 | 34.17 | 0.72 | 27.07 | 100 | 0.79 |
| 769 | 4.21 | 34.38 | 0.29 | 79 | 600 | 4.48 | 34.21 | 0.54 | 27.13 | 94 | 0.89 |
| 966 | 3.72 | 34.38 | 0.49 | 74 | 700 | 4.33 | 34.33 | 0.39 | 27.24 | 84 | 0.99 |
| 1165 | 3.30 | 34.45 | 0.60 | 65 | 800 | 4.13 | 34.38 | 0.31 | 27.30 | 78 | 1.07 |
| | | | | | 1000 | 3.64 | 34.39 | 0.51 | 27.36 | 73 | 1.24 |
| CREST; July 14, 1952; 0839 GCT; 41°03'N, 126°09'W; sounding, 1750 fm; wind, 360°, force 4; weather, overcast; sea, moderate; wire angle, 30°. | | | | | | | | | | | 40.60 |
| 0 | 13.53 | 32.33 | 6.33 | 369 | 0 | 13.53 | 32.33 | 6.33 | 24.24 | 369 | 0.00 |
| 8 | 13.33 | 32.40 | 6.45 | 360 | 10 | 13.25 | 32.44 | 6.57 | 24.38 | 355 | 0.04 |
| 17 | 11.62 | 32.61 | 6.64 | 313 | 20 | 11.00 | 32.62 | 6.60 | 24.95 | 302 | 0.07 |
| 30 | 9.14 | 32.63 | 6.57 | 272 | 30 | 9.14 | 32.63 | 6.57 | 25.26 | 272 | 0.10 |
| 44 | 8.67 | 32.66 | 6.65 | 262 | 50 | 8.52 | 32.70 | 6.60 | 25.41 | 257 | 0.15 |
| 56 | 8.37 | 32.76 | 6.48 | 251 | 75 | 8.09 | 33.17 | 4.95 | 25.85 | 216 | 0.21 |
| 68 | 8.16 | 32.99 | 5.49 | 231 | 100 | 7.69 | 33.49 | 4.17 | 26.16 | 187 | 0.26 |
| 83 | 8.04 | 33.31 | 4.42 | 205 | 150 | 7.37 | 33.80 | 3.23 | 26.44 | 159 | 0.35 |
| 101 | 7.68 | 33.50 | 4.14 | 186 | 200 | 7.07 | 33.93 | 2.58 | 26.59 | 146 | 0.43 |
| 120 | 7.67 | 33.68 | 3.49 | 172 | 250 | 6.60 | 33.94 | 2.23 | 26.66 | 139 | 0.50 |
| 153 | 7.34 | 33.82 | 3.19 | 158 | 300 | 6.17 | 33.99 | 1.81 | 26.76 | 130 | 0.57 |
| 188 | 7.18 | 33.93 | 2.69 | 147 | 400 | 5.61 | 34.07 | 1.17 | 26.89 | 117 | 0.70 |
| 224 | 6.84 | 33.93 | 2.43 | 143 | 500 | (5.15) | (34.14) | (0.79) | (27.00) | (107) | (0.81) |
| 304 | 6.13 | 33.99 | 1.79 | 129 | | | | | | | |
| 388 | 5.68 | 34.06 | 1.23 | 119 | | | | | | | |
| 482 | 5.24 | 34.13 | 0.81 | 109 | | | | | | | |
| CREST; July 14, 1952; 0227 GCT; 40°40'N, 126°52.5'W; sounding, 1740 fm; wind, 360°, force 4; weather, overcast; sea, moderate; wire angle, 20°. | | | | | | | | | | | 40.70 |
| 0 | 15.36 | 32.41 | 6.14 | 399 | 0 | 15.36 | 32.41 | 6.14 | 23.92 | 399 | 0.00 |
| 9 | 15.26 | 32.39 | 6.21 | 399 | 10 | 15.21 | 32.39 | 6.23 | 23.94 | 398 | 0.04 |
| 23 | 14.04 | 32.45 | 6.37 | 370 | 20 | 14.30 | 32.42 | 6.35 | 24.16 | 377 | 0.08 |
| 47 | 13.28 | 32.61 | 6.20 | 343 | 30 | 13.87 | 32.50 | 6.32 | 24.31 | 363 | 0.12 |
| 66 | 10.66 | 32.65 | 6.57 | 294 | 50 | 12.80 | 32.62 | 6.23 | 24.61 | 334 | 0.19 |
| 93 | 8.68 | 32.70 | 6.55 | 260 | 75 | 9.90 | 32.66 | 6.58 | 25.16 | 281 | 0.26 |
| 140 | 7.90 | 33.31 | 4.68 | 203 | 100 | 8.40 | 32.76 | 6.45 | 25.48 | 251 | 0.33 |
| 182 | 7.44 | 33.79 | 3.16 | 161 | 150 | 7.78 | 33.44 | 4.29 | 26.10 | 192 | 0.44 |
| 222 | 7.04 | 33.91 | 2.72 | 147 | 200 | 7.23 | 33.86 | 2.92 | 26.51 | 153 | 0.53 |
| CREST; July 13, 1952; 2050 GCT; 40°23'N, 127°40'W; sounding, 2000 fm; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 10°. | | | | | | | | | | | 40.80 |
| 0 | 15.06 | 32.54 | 6.16 | 384 | 0 | 15.06 | 32.54 | 6.16 | 24.09 | 384 | 0.00 |
| 10 | 14.06 | 32.52 | 6.26 | 365 | 10 | 14.06 | 32.52 | 6.26 | 24.28 | 365 | 0.04 |
| 20 | 14.03 | 32.58 | 6.35 | 360 | 20 | 14.03 | 32.58 | 6.35 | 24.33 | 360 | 0.07 |
| 35 | 13.68 | 32.56 | 6.29 | 355 | 30 | 13.91 | 32.56 | 6.30 | 24.34 | 359 | 0.11 |
| 50 | 11.02 | 32.59 | 6.46 | 304 | 50 | 11.02 | 32.59 | 6.46 | 24.92 | 304 | 0.18 |
| 64 | 9.87 | 32.73 | 6.21 | 275 | 75 | 9.40 | 32.84 | 5.85 | 25.39 | 260 | 0.25 |
| 78 | 9.29 | 32.86 | 5.81 | 257 | 100 | 8.78 | 33.07 | 5.23 | 25.66 | 234 | 0.31 |
| 97 | 8.82 | 33.04 | 5.33 | 236 | 150 | 7.94 | 33.61 | 3.82 | 26.21 | 181 | 0.41 |
| 121 | 8.44 | 33.26 | 4.78 | 214 | 200 | 7.39 | 33.89 | 2.83 | 26.51 | 153 | 0.50 |
| 149 | 7.97 | 33.60 | 3.88 | 182 | | | | | | | |
| 194 | 7.46 | 33.87 | 2.91 | 155 | | | | | | | |
| 239 | 7.08 | 33.96 | 2.59 | 144 | | | | | | | |

SIO

CCOFI 5207

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **40.90** | CREST; July 13, 1952; 1513 GCT; 40°04'N, 128°22.5'W; sounding, 2500 fm; wind, 360°, force 3; weather, overcast; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | 15.14 | 32.49 | 6.19 | 389 | 0 | 15.14 | 32.49 | 6.19 | 24.03 | 389 | 0.00 |
| 10 | 14.42 | 32.60 | 6.19 | 366 | 10 | 14.42 | 32.60 | 6.19 | 24.27 | 366 | 0.04 |
| 25 | 13.97 | 32.56 | 6.25 | 360 | 20 | 14.14 | 32.57 | 6.23 | 24.30 | 363 | 0.07 |
| 48 | 10.53 | 32.71 | 6.80 | 287 | 30 | 13.25 | 32.56 | 6.31 | 24.48 | 346 | 0.11 |
| 72 | 9.17 | 32.83 | 7.11 | 257 | 50 | 10.44 | 32.72 | 6.89 | 25.12 | 285 | 0.17 |
| 97 | 8.33 | 33.04 | 5.60 | 229 | 75 | 9.05 | 32.85 | 7.11 | 25.45 | 254 | 0.24 |
| 148 | 8.04 | 33.64 | 3.81 | 181 | 100 | 8.30 | 33.08 | 5.28 | 25.74 | 226 | 0.30 |
| 192 | 7.88 | 33.82 | 2.83 | 165 | 150 | 8.02 | 33.65 | 3.74 | 26.23 | 179 | 0.40 |
| 235 | 7.36 | 33.86 | 2.64 | 155 | 200 | 7.81 | 33.83 | 2.78 | 26.40 | 163 | 0.49 |
| 279 | 6.89 | 33.95 | 2.25 | 142 | 250 | 7.18 | 33.88 | 2.53 | 26.53 | 151 | 0.57 |
| 371 | 6.19 | 34.03 | 1.51 | 127 | 300 | 6.73 | 33.97 | 2.05 | 26.67 | 138 | 0.65 |
| 459 | 5.54 | 34.08 | 0.97 | 116 | 400 | 5.95 | 34.05 | 1.32 | 26.83 | 123 | 0.78 |
| 551 | 5.12 | 34.14 | 0.65 | 106 | 500 | 5.34 | 34.11 | 0.81 | 26.95 | 111 | 0.90 |
| 733 | 4.32 | 34.28 | 0.03 | 88 | 600 | 4.90 | 34.18 | 0.43 | 27.06 | 101 | 1.02 |
| 916 | 3.61 | 34.39 | 0.33 | 72 | 700 | 4.47 | 34.25 | 0.08 | 27.16 | 91 | 1.12 |
| 1111 | 3.20 | 34.43 | 0.56 | 66 | 800 | 4.03 | 34.33 | 0.10 | 27.27 | 81 | 1.21 |
| | | | | | 1000 | 3.41 | 34.41 | 0.47 | 27.40 | 69 | 1.38 |
| **43.42** | CREST; July 15, 1952; 0250 GCT; 41°04'N, 124°22'W; sounding, 130 fm; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 09°. | | | | | | | | | | |
| 0 | 12.47 | 33.47 | 6.82 | 265 | 0 | 12.47 | 33.47 | 6.82 | 25.33 | 265 | 0.00 |
| 10 | 10.06 | 33.47 | 5.33 | 224 | 10 | 10.06 | 33.47 | 5.33 | 25.77 | 224 | 0.02 |
| 25 | 8.55 | 33.48 | 4.12 | 200 | 20 | 8.73 | 33.47 | 4.23 | 25.98 | 203 | 0.05 |
| 50 | 8.16 | 33.60 | 3.85 | 185 | 30 | 8.47 | 33.50 | 4.05 | 26.05 | 197 | 0.07 |
| 74 | 7.90 | 33.77 | 3.45 | 169 | 50 | 8.16 | 33.60 | 3.85 | 26.17 | 185 | 0.10 |
| 98 | 7.78 | 33.87 | 3.11 | 160 | 75 | 7.89 | 33.77 | 3.40 | 26.35 | 169 | 0.15 |
| 150 | 7.33 | 33.92 | 2.40 | 150 | 100 | 7.75 | 33.87 | 3.07 | 26.44 | 159 | 0.19 |
| | | | | | 150 | 7.33 | 33.92 | 2.40 | 26.54 | 150 | 0.27 |
| **43.50** | CREST; July 15, 1952; 0656 GCT; 40°46'N, 124°56'W; sounding, 1500 fm; wind, 350°, force 3; weather, overcast; sea, rough; wire angle, 24°. | | | | | | | | | | |
| 0 | 12.60 | 33.04 | 6.49 | 299 | 0 | 12.60 | 33.04 | 6.49 | 24.97 | 299 | 0.00 |
| 9 | 12.43 | 33.12 | 6.65 | 290 | 10 | 12.30 | 33.14 | 6.64 | 25.11 | 286 | 0.03 |
| 18 | 10.98 | 33.26 | 6.28 | 254 | 20 | 10.70 | 33.30 | 6.00 | 25.53 | 247 | 0.06 |
| 32 | 9.54 | 33.42 | 5.16 | 219 | 30 | 9.75 | 33.41 | 5.30 | 25.77 | 223 | 0.08 |
| 50 | 8.77 | 33.55 | 4.57 | 198 | 50 | 8.77 | 33.55 | 4.57 | 26.04 | 198 | 0.12 |
| 64 | 8.48 | 33.58 | 4.29 | 191 | 75 | 8.10 | 33.73 | 3.70 | 26.28 | 175 | 0.17 |
| 77 | 8.08 | 33.75 | 3.69 | 173 | 100 | 7.86 | 33.87 | 3.04 | 26.43 | 161 | 0.21 |
| 99 | 7.88 | 33.87 | 3.07 | 161 | 150 | 7.55 | 33.91 | 2.93 | 26.50 | 154 | 0.29 |
| 121 | 7.69 | 33.88 | 2.95 | 158 | 200 | 6.97 | 33.94 | 2.51 | 26.61 | 144 | 0.37 |
| 146 | 7.59 | 33.91 | 2.94 | 154 | 250 | 6.22 | 34.01 | 1.92 | 26.76 | 129 | 0.44 |
| 192 | 7.10 | 33.93 | 2.60 | 146 | 300 | 5.98 | 34.10 | 1.44 | 26.87 | 119 | 0.50 |
| 244 | 6.26 | 34.00 | 1.97 | 130 | 400 | 5.66 | 34.15 | 0.97 | 26.95 | 112 | 0.62 |
| 287 | 6.04 | 34.09 | 1.54 | 121 | 500 | 5.48 | 34.21 | 0.73 | 27.01 | 105 | 0.73 |
| 388 | 5.68 | 34.14 | 1.01 | 113 | 600 | (5.09) | (34.30) | (0.42) | (27.13) | (94) | (0.84) |
| 489 | 5.51 | 34.20 | 0.78 | 106 | | | | | | | |
| 593 | 5.12 | 34.30 | 0.42 | 94 | | | | | | | |
| **47.50** | CREST; July 15, 1952; 1946 GCT; 40°14'N, 124°32'W; sounding, 95 fm; wind, 340°, force 2; weather, overcast; sea, moderate; wire angle, 18°. | | | | | | | | | | |
| 0 | 11.67 | 32.84 | 6.19 | 297 | 0 | 11.67 | 32.84 | 6.19 | 25.00 | 297 | 0.00 |
| 10 | 11.13 | 33.10 | 6.10 | 269 | 10 | 11.13 | 33.10 | 6.10 | 25.30 | 269 | 0.03 |
| 25 | 10.40 | 33.04 | 5.87 | 261 | 20 | 11.08 | 33.05 | 5.97 | 25.27 | 271 | 0.06 |
| 48 | 8.98 | 33.21 | 5.04 | 226 | 30 | 9.38 | 33.05 | 5.72 | 25.55 | 244 | 0.08 |
| 71 | 8.20 | 33.62 | 3.51 | 184 | 50 | 8.88 | 33.24 | 4.68 | 25.78 | 222 | 0.13 |
| 93 | 8.23 | 33.63 | 3.54 | 184 | 75 | 8.21 | 33.63 | 3.52 | 26.19 | 184 | 0.18 |
| 115 | 8.11 | 33.77 | 3.03 | 172 | 100 | 8.20 | 33.65 | 3.53 | 26.21 | 182 | 0.23 |
| 142 | 7.88 | 33.87 | 2.40 | 161 | 150 | (7.82) | (33.89) | (2.37) | (26.45) | (159) | (0.31) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; July 15, 1952; 1335 GCT; 39°54'N, 125°18'W; sounding, 1500 fm; wind, 330°, force 4; weather, overcast; sea, moderate; wire angle, 30°. | | | | | | | | | | | 47.60 |
| 0 | 13.91 | 32.67 | 6.68 | 351 | 0 | 13.91 | 32.67 | 6.68 | 24.43 | 351 | 0.00 |
| 8 | 13.91 | 32.66 | 6.61 | 352 | 10 | 13.91 | 32.66 | 6.50 | 24.42 | 352 | 0.04 |
| 17 | 13.17 | 32.70 | 6.06 | 335 | 20 | 12.60 | 32.70 | 6.10 | 24.71 | 324 | 0.07 |
| 30 | 11.44 | 32.66 | 6.46 | 306 | 30 | 11.44 | 32.66 | 6.46 | 24.90 | 306 | 0.10 |
| 47 | 10.19 | 32.72 | 5.37 | 281 | 50 | 10.00 | 32.72 | 5.40 | 25.20 | 278 | 0.16 |
| 60 | 9.41 | 32.71 | 6.04 | 270 | 75 | 8.90 | 32.76 | 6.17 | 25.40 | 258 | 0.23 |
| 72 | 8.98 | 32.74 | 6.18 | 261 | 100 | 8.13 | 33.32 | 4.65 | 25.96 | 206 | 0.28 |
| 92 | 8.44 | 33.13 | 4.97 | 224 | 150 | 7.66 | 33.74 | 3.54 | 26.36 | 168 | 0.38 |
| 109 | 8.03 | 33.46 | 4.30 | 194 | 200 | 7.35 | 33.93 | 2.65 | 26.55 | 149 | 0.46 |
| 129 | 7.99 | 33.62 | 3.85 | 181 | 250 | 6.80 | 34.04 | 1.90 | 26.71 | 134 | 0.53 |
| 169 | 7.47 | 33.82 | 3.22 | 159 | 300 | 6.42 | 34.05 | 1.46 | 26.77 | 128 | 0.60 |
| 214 | 7.26 | 33.98 | 2.40 | 145 | 400 | 5.48 | 34.08 | 1.09 | 26.91 | 115 | 0.73 |
| 252 | 6.78 | 34.04 | 1.88 | 134 | 500 | 4.90 | 34.17 | 0.76 | 27.05 | 102 | 0.84 |
| 347 | 6.00 | 34.06 | 1.17 | 123 | | | | | | | |
| 443 | 5.12 | 34.11 | 1.03 | 109 | | | | | | | |
| 547 | 4.75 | 34.21 | 0.56 | 97 | | | | | | | |
| CREST; July 16, 1952; 0027 GCT; 39°45'N, 123°56'W; sounding, 70 fm; wind, 160°, force 2; weather, overcast; sea, slight; wire angle, 03°. | | | | | | | | | | | 50.47 |
| 0 | 11.70 | 33.58 | 6.30 | 243 | 0 | 11.70 | 33.58 | 6.30 | 25.56 | 243 | 0.00 |
| 10 | 10.40 | 33.60 | 6.33 | 219 | 10 | 10.40 | 33.60 | 6.33 | 25.81 | 219 | 0.02 |
| 20 | 9.92 | 33.60 | 5.75 | 212 | 20 | 9.92 | 33.60 | 5.75 | 25.89 | 212 | 0.04 |
| CREST; July 16, 1952; 0226 GCT; 39°40'N, 124°08'W; sounding, 500 fm; wind, 360°, force 3; weather, overcast; sea, moderate; wire angle, 18°. | | | | | | | | | | | 50.50 |
| 0 | 11.37 | 33.44 | 6.42 | 248 | 0 | 11.37 | 33.44 | 6.42 | 25.52 | 248 | 0.00 |
| 10 | 10.28 | 33.53 | 5.65 | 223 | 10 | 10.28 | 33.53 | 5.65 | 25.78 | 223 | 0.02 |
| 24 | 8.79 | 33.56 | 4.73 | 197 | 20 | 8.92 | 33.55 | 4.82 | 26.02 | 200 | 0.04 |
| 48 | 8.46 | 33.64 | 4.37 | 186 | 30 | 8.70 | 33.57 | 4.58 | 26.07 | 195 | 0.06 |
| 71 | 8.08 | 33.85 | 2.74 | 165 | 50 | 8.43 | 33.66 | 4.30 | 26.18 | 185 | 0.10 |
| 94 | 7.76 | 33.93 | 2.68 | 155 | 75 | 8.00 | 33.87 | 2.72 | 26.41 | 163 | 0.15 |
| 143 | 7.60 | 33.98 | 1.77 | 149 | 100 | 7.74 | 33.94 | 2.62 | 26.50 | 154 | 0.19 |
| 187 | 7.54 | 34.00 | 1.76 | 147 | 150 | 7.60 | 33.98 | 1.76 | 26.55 | 149 | 0.26 |
| 231 | 7.09 | 34.06 | 1.43 | 136 | 200 | 7.39 | 34.01 | 1.72 | 26.61 | 144 | 0.34 |
| 277 | 6.92 | 34.12 | 1.12 | 130 | 250 | 7.02 | 34.09 | 1.29 | 26.72 | 133 | 0.41 |
| 328 | 6.74 | 34.14 | 1.09 | 126 | 300 | 6.84 | 34.13 | 1.10 | 26.78 | 128 | 0.48 |
| 375 | 6.55 | 34.14 | 1.86u | 123 | 400 | 6.34 | 34.14 | 1.00 | 26.85 | 121 | 0.61 |
| 422 | 6.18 | 34.14 | 0.94 | 119 | 500 | 5.77 | 34.18 | 0.69 | 26.96 | 111 | 0.73 |
| 469 | 5.94 | 34.16 | 0.76 | 114 | | | | | | | |
| 571 | 5.38 | 34.24 | 0.57 | 102 | | | | | | | |
| CREST; July 16, 1952; 0758 GCT; 39°20'N, 124°52'W; sounding, 1650 fm; wind, 360°, force 6; weather, overcast; sea, high; wire angle, 38°. | | | | | | | | | | | 50.60 |
| 0 | 14.41 | 32.68 | 6.31 | 360 | 0 | 14.41 | 32.68 | 6.31 | 24.33 | 360 | 0.00 |
| 8 | 14.43 | 32.64 | 6.86 | 364 | 10 | 14.43 | 32.64 | 6.85 | 24.30 | 364 | 0.04 |
| 20 | 14.44 | 32.67 | 6.19 | 362 | 20 | 14.44 | 32.67 | 6.19 | 24.32 | 362 | 0.07 |
| 43 | 12.90 | 32.66 | 6.40 | 333 | 30 | 14.30 | 32.67 | 6.24 | 24.35 | 359 | 0.11 |
| 62 | 11.94 | 32.70 | 6.55 | 312 | 50 | 12.62 | 32.67 | 6.49 | 24.69 | 327 | 0.18 |
| 83 | 10.03 | 32.77 | 6.18 | 275 | 75 | 10.55 | 32.74 | 6.35 | 25.12 | 285 | 0.25 |
| 118 | 8.46 | 33.18 | 5.02 | 221 | 100 | 9.19 | 32.89 | 5.65 | 25.46 | 253 | 0.32 |
| 149 | 7.78 | 33.61 | 4.25 | 179 | 150 | 7.77 | 33.62 | 4.22 | 26.25 | 178 | 0.43 |
| 185 | 7.50 | 33.78 | 3.29 | 163 | 200 | 7.37 | 33.82 | 3.08 | 26.46 | 158 | 0.52 |
| 215 | 7.24 | 33.85 | 2.90 | 154 | 250 | 6.86 | 33.93 | 2.61 | 26.62 | 143 | 0.59 |
| 286 | 6.55 | 33.98 | 2.33 | 135 | 300 | 6.48 | 33.99 | 2.20 | 26.71 | 134 | 0.66 |
| 351 | 6.12 | 34.01 | 1.43 | 128 | 400 | 5.75 | 34.04 | 1.04 | 26.85 | 121 | 0.80 |
| 420 | 5.60 | 34.06 | 0.93 | 118 | 500 | 5.12 | 34.10 | 0.62 | 26.97 | 109 | 0.92 |
| 558 | 4.81 | 34.14 | 0.51 | 103 | 600 | 4.68 | 34.18 | 0.45 | 27.08 | 99 | 1.03 |
| 715 | 4.30 | 34.26 | 0.37 | 89 | 700 | 4.35 | 34.25 | 0.38 | 27.18 | 90 | 1.13 |
| 884 | 3.81 | 34.34 | 0.41 | 78 | 800 | 4.05 | 34.31 | 0.38 | 27.25 | 83 | 1.22 |
| | | | | | 1000 | (3.50) | (34.37) | | (27.36) | (73) | (1.39) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **50.70** | CREST; July 16, 1952; 1427 GCT; 39°00'N, 125°36'W; sounding, 1500 fm; wind, 350°, force 6; weather, overcast; sea, very rough; wire angle, 28°. | | | | | | | | | | |
| 0 | 14.82 | 32.78 | 6.25 | 361 | 0 | 14.82 | 32.78 | 6.25 | 24.32 | 361 | 0.00 |
| 9 | 14.88 | 32.74 | 6.01 | 365 | 10 | 14.88 | 32.74 | 6.02 | 24.28 | 365 | 0.04 |
| 23 | 14.86 | 32.78 | 6.14 | 362 | 20 | 14.87 | 32.77 | 6.12 | 24.30 | 363 | 0.07 |
| 36 | 14.79 | 32.82 | 6.16 | 358 | 30 | 14.83 | 32.81 | 6.15 | 24.34 | 359 | 0.11 |
| 53 | 14.15 | 32.82 | 6.23 | 345 | 50 | 14.45 | 32.82 | 6.22 | 24.43 | 351 | 0.18 |
| 65 | 12.57 | 32.72 | 6.62 | 322 | 75 | 11.10 | 32.73 | 6.60 | 25.01 | 295 | 0.26 |
| 82 | 10.38 | 32.74 | 6.52 | 283 | 100 | 9.27 | 32.79 | 6.10 | 25.37 | 262 | 0.33 |
| 103 | 9.19 | 32.80 | 5.98 | 260 | 150 | 8.14 | 33.22 | 5.40 | 25.88 | 213 | 0.45 |
| 126 | 8.50 | 33.06 | 5.42 | 230 | | | | | | | |
| 150 | 8.14 | 33.22 | 5.40 | 213 | | | | | | | |
| **50.80** | CREST; July 16, 1952; 1939 GCT; 38°40'N, 126°22'W; sounding, 2300 fm; wind, 020°, force 6; weather, cloudy; sea, high; wire angle, 30°. | | | | | | | | | | |
| 0 | 14.68 | 32.78 | 6.58 | 358 | 0 | 14.68 | 32.78 | 6.58 | 24.35 | 358 | 0.00 |
| 8 | 14.67 | 32.82 | 6.06 | 355 | 10 | 14.67 | 32.82 | 6.09 | 24.38 | 355 | 0.04 |
| 22 | 14.67 | 32.80 | 6.18 | 357 | 20 | 14.67 | 32.80 | 6.16 | 24.37 | 357 | 0.07 |
| 48 | 12.20 | 32.77 | 6.51 | 312 | 30 | 14.67 | 32.79 | 6.30 | 24.36 | 357 | 0.11 |
| 70 | 10.92 | 32.74 | 6.70 | 292 | 50 | 12.05 | 32.77 | 6.54 | 24.87 | 309 | 0.17 |
| 95 | 9.89 | 32.74 | 6.52 | 275 | 75 | 10.68 | 32.74 | 6.69 | 25.09 | 288 | 0.25 |
| 144 | 8.44 | 33.46 | 4.78 | 200 | 100 | 9.72 | 32.77 | 6.32 | 25.28 | 270 | 0.32 |
| 190 | 8.30 | 33.82 | 3.85 | 171 | 150 | 8.42 | 33.52 | 4.66 | 26.07 | 195 | 0.44 |
| 239 | 7.62 | 34.00 | 2.62 | 148 | 200 | 8.19 | 33.88 | 3.60 | 26.39 | 165 | 0.53 |
| 282 | 6.81 | 33.96 | 2.95 | 140 | 250 | 7.35 | 33.99 | 2.68 | 26.60 | 145 | 0.61 |
| 377 | 6.02 | 33.97 | 2.32 | 130 | 300 | 6.62 | 33.96 | 2.95 | 26.67 | 138 | 0.68 |
| 470 | 5.51 | 34.09 | 1.50 | 115 | 400 | 5.88 | 34.00 | 2.10 | 26.80 | 126 | 0.82 |
| 562 | 5.09 | 34.13 | 1.06 | 107 | 500 | 5.36 | 34.10 | 1.33 | 26.94 | 112 | 0.94 |
| 741 | 4.59 | 34.29 | 0.68 | 90 | 600 | 4.98 | 34.17 | 0.94 | 27.04 | 103 | 1.05 |
| 924 | 3.93 | 34.38 | 0.66 | 76 | 700 | 4.72 | 34.26 | 0.73 | 27.14 | 93 | 1.16 |
| 1110 | 3.42 | 34.48 | 0.83 | 64 | 800 | 4.39 | 34.32 | 0.67 | 27.23 | 85 | 1.26 |
| | | | | | 1000 | 3.69 | 34.42 | 0.72 | 27.38 | 71 | 1.43 |
| **50.90** | CREST; July 16, 1952; 2353 GCT; 38°19'N, 127°05'W; sounding, 2390 fm; wind, 360°, force 6; weather, cloudy; sea, very high; wire angle, 26°. | | | | | | | | | | |
| 0 | 15.06 | 32.87 | 5.92 | 360 | 0 | 15.06 | 32.87 | 5.92 | 24.34 | 360 | 0.00 |
| 9 | 15.07 | 32.81 | 5.92 | 364 | 10 | 15.07 | 32.81 | 5.92 | 24.29 | 364 | 0.04 |
| 18 | 15.07 | 32.84 | 5.93 | 362 | 20 | 15.06 | 32.84 | 5.93 | 24.32 | 362 | 0.07 |
| 32 | 15.03 | 32.84 | 5.94 | 361 | 30 | 15.04 | 32.84 | 5.94 | 24.32 | 361 | 0.11 |
| 49 | 14.84 | 32.92 | 5.99 | 351 | 50 | 14.83 | 32.92 | 6.00 | 24.43 | 351 | 0.18 |
| 62 | 13.85 | 32.89 | 6.14 | 334 | 75 | 12.62 | 32.94 | 6.28 | 24.89 | 307 | 0.26 |
| 75 | 12.62 | 32.94 | 6.28 | 307 | 100 | 10.50 | 32.95 | 5.55 | 25.29 | 269 | 0.34 |
| 95 | 11.32 | 32.94 | 5.76 | 284 | 150 | 8.97 | 33.53 | 3.64 | 25.99 | 202 | 0.45 |
| 115 | 9.47 | 33.13 | 4.86 | 239 | 200 | 8.42 | 33.84 | 2.78 | 26.32 | 171 | 0.55 |
| 140 | 9.09 | 33.44 | 3.94 | 211 | 250 | 7.67 | 33.93 | 2.78 | 26.50 | 154 | 0.63 |
| 185 | 8.53 | 33.75 | 3.00 | 179 | 300 | 6.87 | 33.94 | 3.32 | 26.62 | 142 | 0.71 |
| 235 | 8.12 | 33.93 | 2.58 | 160 | 400 | 5.87 | 33.98 | 1.72 | 26.79 | 127 | 0.85 |
| 277 | 7.18 | 33.94 | 3.54 | 146 | 500 | 5.25 | 34.06 | 0.98 | 26.92 | 114 | 0.97 |
| 378 | 6.06 | 33.96 | 1.94 | 131 | 600 | (4.77) | (34.15) | | (27.05) | (102) | (1.09) |
| 478 | 5.37 | 34.04 | 1.10 | 117 | | | | | | | |
| 582 | 4.84 | 34.14 | 0.68 | 103 | | | | | | | |
| **53.55** | CREST; July 12, 1952; 1317 GCT; 38°55.5'N, 124°05'W; sounding, 800 fm; wind, 340°, force 2; weather, overcast; sea, slight; wire angle, 08°. | | | | | | | | | | |
| 0 | 12.69 | 33.01 | 6.35 | 303 | 0 | 12.69 | 33.01 | 6.35 | 24.93 | 303 | 0.00 |
| 10 | 11.04 | 33.12 | 6.51 | 266 | 10 | 11.04 | 33.12 | 6.51 | 25.33 | 266 | 0.03 |
| 20 | 10.18 | 33.22 | 6.04 | 244 | 20 | 10.18 | 33.22 | 6.04 | 25.55 | 244 | 0.05 |
| 35 | - | 33.50 | 5.32 | | 30 | 9.85 | 33.40 | 5.51 | 25.75 | 225 | 0.08 |
| 50 | 9.30 | 33.58 | 4.86 | 203 | 50 | 9.30 | 33.58 | 4.86 | 25.98 | 203 | 0.12 |
| 65 | 8.92 | 33.70 | 4.06 | 189 | 75 | 8.60 | 33.77 | 3.35 | 26.24 | 179 | 0.17 |
| 79 | 8.52 | 33.80 | 3.07 | 175 | 100 | 8.29 | 33.94 | 2.46 | 26.42 | 162 | 0.21 |
| 98 | 8.30 | 33.93 | 2.54 | 163 | 150 | 7.99 | 34.04 | 1.96 | 26.54 | 150 | 0.29 |
| 122 | 8.13 | 34.01 | 1.96 | 154 | 200 | 7.65 | 34.04 | 1.61 | 26.59 | 145 | 0.37 |
| 150 | 7.99 | 34.04 | 1.96 | 150 | 250 | (7.46) | (34.08) | (1.52) | (26.65) | (140) | (0.44) |
| 198 | 7.67 | 34.04 | 1.63 | 146 | | | | | | | |
| 244 | 7.47 | 34.08 | 1.54 | 140 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| CREST; July 12, 1952; 0655 GCT; 38°36'N, 124°48'W; sounding, 2000 fm; wind, 260°, force 3; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 53.65 |
| 0 | 14.88 | 32.71 | 6.52 | 368 | 0 | 14.88 | 32.71 | 6.52 | 24.26 | 368 | 0.00 |
| 10 | 14.02 | 32.72 | 6.30 | 350 | 10 | 14.02 | 32.72 | 6.30 | 24.44 | 350 | 0.04 |
| 20 | 13.71 | 32.71 | 6.34 | 344 | 20 | 13.71 | 32.71 | 6.34 | 24.50 | 344 | 0.07 |
| 35 | 13.15 | 32.76 | 6.41 | 330 | 30 | 13.42 | 32.75 | 6.39 | 24.59 | 336 | 0.10 |
| 50 | 10.28 | 32.74 | 6.55 | 281 | 50 | 10.28 | 32.74 | 6.55 | 25.16 | 281 | 0.17 |
| 65 | 9.70 | 32.74 | 6.32 | 272 | 75 | 9.30 | 32.78 | 6.10 | 25.36 | 263 | 0.23 |
| 80 | 8.99 | 32.85 | 5.99 | 253 | 100 | 8.51 | 33.17 | 5.03 | 25.78 | 222 | 0.30 |
| 99 | 8.52 | 33.15 | 5.08 | 224 | 150 | 8.61 | 33.79 | 3.21 | 26.25 | 178 | 0.40 |
| 122 | 8.87 | 33.53 | 4.55 | 201 | 200 | 8.17 | 34.01 | 1.93 | 26.49 | 155 | 0.48 |
| 149 | 8.62 | 33.78 | 3.30 | 178 | 250 | 7.63 | 34.05 | 2.07 | 26.60 | 144 | 0.56 |
| 195 | 8.20 | 34.00 | 1.91 | 156 | 300 | 7.13 | 34.09 | 1.42 | 26.71 | 135 | 0.63 |
| 242 | 7.76 | 34.05 | 2.10 | 146 | 400 | 6.51 | 34.13 | 1.20 | 26.82 | 124 | 0.76 |
| 288 | 7.20 | 34.08 | 1.46 | 136 | 500 | 5.81 | 34.15 | 0.73 | 26.93 | 114 | 0.89 |
| 387 | 6.63 | 34.13 | 1.25 | 125 | 600 | (5.40) | (34.28) | | (27.08) | (99) | (1.00) |
| 484 | 5.90 | 34.14 | 0.80 | 115 | | | | | | | |
| 587 | 5.44 | 34.27 | 0.46 | 100 | | | | | | | |
| CREST; July 11, 1952; 1709 GCT; 38°30'N, 123°22'W; sounding, 49 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | 57.51 |
| 0 | 12.44 | 32.95 | 7.62 | 303 | 0 | 12.44 | 32.95 | 7.62 | 24.94 | 303 | 0.00 |
| 10 | 11.07 | 33.40 | 6.09 | 245 | 10 | 11.07 | 33.40 | 6.09 | 25.54 | 245 | 0.03 |
| 20 | 10.05 | 33.66 | 4.72 | 209 | 20 | 10.05 | 33.66 | 4.72 | 25.92 | 209 | 0.05 |
| 30 | 8.94 | 33.80 | 3.57 | 182 | 30 | 8.94 | 33.80 | 3.57 | 26.21 | 182 | 0.07 |
| 50 | 8.50 | 33.87 | 3.30 | 170 | 50 | 8.50 | 33.87 | 3.30 | 26.33 | 170 | 0.11 |
| 75 | 8.32 | 33.91 | 1.43 | 164 | 75 | 8.32 | 33.91 | 1.43 | 26.39 | 164 | 0.15 |
| CREST; July 11, 1952; 1941 GCT; 38°22'N, 123°40'W; sounding, 450 fm; wind, 230°, force 2; weather, overcast; sea, smooth; wire angle, 03°. | | | | | | | | | | | 57.55 |
| 0 | 12.28 | 33.48 | 6.96 | 261 | 0 | 12.28 | 33.48 | 6.96 | 25.38 | 261 | 0.00 |
| 10 | 10.27 | 33.55 | 6.19 | 221 | 10 | 10.27 | 33.55 | 6.19 | 25.80 | 221 | 0.02 |
| 20 | 9.98 | 33.55 | 5.77 | 216 | 20 | 9.98 | 33.55 | 5.77 | 25.84 | 216 | 0.05 |
| 35 | 9.05 | 33.59 | 4.65 | 199 | 30 | 9.35 | 33.57 | 5.12 | 25.96 | 205 | 0.07 |
| 50 | 8.70 | 33.63 | 3.89 | 191 | 50 | 8.70 | 33.63 | 3.89 | 26.11 | 191 | 0.11 |
| 65 | 8.71 | 33.74 | 3.49 | 183 | 75 | 8.60 | 33.81 | 3.05 | 26.27 | 176 | 0.15 |
| 79 | 8.55 | 33.83 | 2.88 | 174 | 100 | 8.31 | 33.96 | 2.53 | 26.43 | 161 | 0.20 |
| 98 | 8.32 | 33.95 | 2.57 | 161 | 150 | 7.97 | 34.03 | 1.84 | 26.54 | 151 | 0.27 |
| 122 | 8.17 | 34.00 | 2.26 | 156 | 200 | 7.71 | 34.10 | 1.58 | 26.63 | 142 | 0.35 |
| 150 | 7.97 | 34.03 | 1.84 | 151 | 250 | 7.43 | 34.11 | 1.50 | 26.68 | 137 | 0.42 |
| 196 | 7.73 | 34.10 | 1.59 | 142 | 300 | 7.12 | 34.11 | 1.32 | 26.72 | 133 | 0.49 |
| 243 | 7.48 | 34.11 | 1.51 | 138 | 400 | 6.42 | 34.17 | 0.97 | 26.86 | 120 | 0.62 |
| 289 | 7.20 | 34.11 | 1.38 | 134 | 500 | 6.01 | 34.20 | 0.62 | 26.94 | 112 | 0.74 |
| 388 | 6.48 | 34.16 | 1.01 | 121 | 600 | (5.10) | (34.29) | | (27.12) | (95) | (0.85) |
| 484 | 6.10 | 34.19 | 0.68 | 114 | | | | | | | |
| 588 | 5.20 | 34.29 | 0.39 | 96 | | | | | | | |
| CREST; July 12, 1952; 0139 GCT; 38°02.5'N, 124°24'W; sounding, 2100 fm; wind, 140°, force 2; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | 57.65 |
| 0 | 14.06 | 33.08 | 6.42 | 324 | 0 | 14.06 | 33.08 | 6.42 | 24.71 | 324 | 0.00 |
| 10 | 11.94 | 33.24 | 6.44 | 272 | 10 | 11.94 | 33.24 | 6.44 | 25.26 | 272 | 0.03 |
| 20 | 10.93 | 33.40 | 6.42 | 243 | 20 | 10.93 | 33.40 | 6.42 | 25.56 | 243 | 0.06 |
| 35 | - | 33.48 | 4.99 | | 30 | 9.76 | 33.45 | 5.80 | 25.80 | 220 | 0.08 |
| 50 | 8.58 | 33.55 | 4.26 | 195 | 50 | 8.58 | 33.55 | 4.26 | 26.07 | 195 | 0.12 |
| 65 | 8.25 | 33.62 | 4.25 | 185 | 75 | 8.16 | 33.67 | 4.14 | 26.23 | 180 | 0.17 |
| 80 | 8.13 | 33.69 | 4.05 | 178 | 100 | 8.09 | 33.82 | 3.20 | 26.36 | 168 | 0.21 |
| 99 | 8.10 | 33.81 | 3.22 | 169 | 150 | 7.29 | 33.88 | 3.34 | 26.52 | 152 | 0.29 |
| 123 | 7.90 | 33.89 | 3.05 | 160 | 200 | 7.25 | 34.06 | 1.82 | 26.67 | 138 | 0.37 |
| 151 | 7.28 | 33.88 | 3.35 | 152 | 250 | 6.94 | 34.09 | 1.41 | 26.73 | 132 | 0.44 |
| 197 | 7.29 | 34.05 | 1.86 | 140 | 300 | 6.52 | 34.15 | 1.03 | 26.84 | 122 | 0.50 |
| 244 | 6.99 | 34.09 | 1.46 | 133 | 400 | 5.68 | 34.20 | 0.77 | 26.98 | 108 | 0.62 |
| 290 | 6.62 | 34.14 | 1.10 | 124 | 500 | 5.11 | 34.23 | 0.48 | 27.07 | 100 | 0.73 |
| 390 | 5.74 | 34.20 | 0.79 | 109 | 600 | (4.83) | (34.30) | (0.42) | (27.16) | (91) | (0.83) |
| 487 | 5.16 | 34.22 | 0.50 | 101 | | | | | | | |
| 591 | 4.86 | 34.30 | 0.43 | 92 | | | | | | | |

SIO

CCOFI 5207

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

60.55 CREST; July 18, 1952; 0231 GCT; 37°48'N, 123°15'W; sounding, 65 fm; wind, 300°, force 2; weather, overcast; sea, rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.84 | 33.30 | 6.70 | 284 | 0 | 12.84 | 33.30 | 6.70 | 25.13 | 284 | 0.00 |
| 10 | 11.86 | 33.40 | 6.58 | 259 | 10 | 11.86 | 33.40 | 6.58 | 25.39 | 259 | 0.03 |
| 20 | 10.48 | 33.39 | 5.68 | 236 | 20 | 10.48 | 33.39 | 5.68 | 25.63 | 236 | 0.05 |
| 30 | 10.21 | 33.36 | 5.25 | 234 | 30 | 10.21 | 33.36 | 5.25 | 25.66 | 234 | 0.08 |
| 50 | 9.44 | 33.57 | 4.94 | 206 | 50 | 9.44 | 33.57 | 4.94 | 25.95 | 206 | 0.12 |
| 75 | 8.89 | 33.74 | 3.03 | 185 | 75 | 8.89 | 33.74 | 3.03 | 26.17 | 185 | 0.17 |

60.60 CREST; July 18, 1952; 1118 GCT; 37°37'N, 123°37'W; sounding, 1600 fm; wind, 020°, force 3; weather, overcast; sea, moderate; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.90 | 33.06 | 6.26 | 322 | 0 | 13.90 | 33.06 | 6.26 | 24.73 | 322 | 0.00 |
| 10 | 12.84 | 33.10 | 5.92 | 299 | 10 | 12.84 | 33.10 | 5.92 | 24.97 | 299 | 0.03 |
| 24 | 11.31 | 33.20 | 6.51 | 264 | 20 | 11.64 | 33.16 | 6.32 | 25.25 | 273 | 0.06 |
| 48 | 9.66 | 33.40 | 5.54 | 222 | 30 | 10.83 | 33.25 | 6.49 | 25.46 | 252 | 0.09 |
| 71 | 9.33 | 33.60 | 4.54 | 202 | 50 | 9.66 | 33.41 | 5.44 | 25.79 | 222 | 0.13 |
| 94 | 8.67 | 33.71 | 2.74 | 184 | 75 | 9.12 | 33.63 | 4.28 | 26.05 | 197 | 0.19 |
| 142 | 8.27 | 33.92 | 0.97 | 163 | 100 | 8.63 | 33.74 | 2.30 | 26.21 | 182 | 0.23 |
| 186 | 8.19 | 33.96 | 1.31 | 159 | 150 | 8.26 | 33.93 | 0.99 | 26.42 | 162 | 0.32 |
| 229 | 7.98 | 33.99 | 1.54 | 154 | 200 | 8.12 | 33.97 | 1.42 | 26.47 | 157 | 0.40 |
| 274 | 7.71 | 34.07 | 1.63 | 144 | 250 | 7.85 | 34.03 | 1.61 | 26.56 | 149 | 0.48 |
| 367 | 6.82 | 34.13 | 1.25 | 128 | 300 | 7.58 | 34.09 | 1.58 | 26.64 | 141 | 0.56 |
| 455 | 5.88 | 34.16 | 0.92 | 114 | 400 | 6.36 | 34.15 | 1.13 | 26.86 | 120 | 0.69 |
| 548 | 5.37 | 34.17 | 0.49 | 107 | 500 | 5.64 | 34.16 | 0.69 | 26.96 | 111 | 0.81 |
| 732 | 4.60 | 34.33 | 0.29 | 87 | 600 | 5.09 | 34.20 | 0.39 | 27.05 | 102 | 0.92 |
| 917 | 4.10 | 34.42 | 0.43 | 75 | 700 | 4.72 | 34.30 | 0.30 | 27.17 | 90 | 1.03 |
| 1115 | 3.60 | 34.47 | 0.56 | 66 | 800 | 4.41 | 34.37 | 0.31 | 27.26 | 82 | 1.12 |
| | | | | | 1000 | 3.89 | 34.44 | 0.51 | 27.37 | 71 | 1.29 |

60.70 CREST; July 18, 1952; 0515 GCT; 37°15'N, 124°21'W; sounding, 2000 fm; wind, 020°, force 4; weather, overcast; sea, very rough; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.59 | (33.06) | 6.30 | 336 | 0 | 14.59 | (33.06) | 6.30 | (24.59) | (336) | (0.00) |
| 9 | 14.58 | 33.06 | 6.40 | 336 | 10 | 14.57 | 33.06 | 6.41 | 24.59 | 336 | 0.03 |
| 18 | 13.04 | 33.19 | 6.67 | 296 | 20 | 12.90 | 33.20 | 6.66 | 25.04 | 293 | 0.07 |
| 31 | 10.99 | 33.24 | 5.82 | 256 | 30 | 11.05 | 33.23 | 5.96 | 25.41 | 258 | 0.09 |
| 49 | 9.50 | 33.37 | 4.69 | 222 | 50 | 9.48 | 33.37 | 4.69 | 25.79 | 222 | 0.14 |
| 62 | 9.16 | 33.46 | 4.69 | 210 | 75 | 8.96 | 33.60 | 3.60 | 26.05 | 197 | 0.19 |
| 75 | 8.96 | 33.60 | 3.60 | 197 | 100 | 8.64 | 33.80 | 2.72 | 26.26 | 177 | 0.24 |
| 97 | 8.68 | 33.78 | 2.80 | 179 | 150 | 8.10 | 33.89 | 2.88 | 26.41 | 163 | 0.33 |
| 119 | 8.57 | 33.85 | 2.47 | 172 | 200 | 7.68 | 34.01 | 2.27 | 26.56 | 148 | 0.41 |
| 146 | 8.13 | 33.88 | 2.89 | 164 | 250 | 7.19 | 34.05 | 1.67 | 26.67 | 138 | 0.48 |
| 195 | 7.72 | 34.00 | 2.36 | 149 | 300 | 6.79 | 34.05 | 1.44 | 26.72 | 133 | 0.55 |
| 249 | 7.20 | 34.05 | 1.67 | 138 | 400 | 5.95 | 34.14 | 0.89 | 26.90 | 116 | 0.68 |
| 293 | 6.84 | 34.05 | 1.47 | 134 | 500 | 5.38 | 34.25 | 0.44 | 27.06 | 101 | 0.79 |
| 395 | 5.99 | 34.13 | 0.94 | 117 | 600 | 5.08 | 34.28 | 0.46 | 27.12 | 96 | 0.90 |
| 494 | 5.41 | 34.25 | 0.44 | 101 | | | | | | | |
| 601 | 5.07 | 34.28 | 0.46 | 95 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

CREST; July 17, 1952; 2340 GCT; 36°57'N, 125°04'W; sounding, 2000 fm; wind, 340°, force 5; weather, overcast; sea, high; wire angle, 10°. 60.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.96 | 32.95 | 6.16 | 352 | 0 | 14.96 | 32.95 | 6.16 | 24.42 | 352 | 0.00 |
| 10 | 14.97 | 32.94 | 6.16 | 353 | 10 | 14.97 | 32.94 | 6.16 | 24.41 | 353 | 0.04 |
| 25 | 14.59 | 32.94 | 6.37 | 345 | 20 | 14.97 | 32.94 | 6.33 | 24.41 | 353 | 0.07 |
| 54 | 9.68 | 33.21 | 5.53 | 237 | 30 | 13.35 | 32.94 | 6.35 | 24.75 | 320 | 0.10 |
| 78 | 8.58 | 33.79 | 4.23 | 177 | 50 | 10.12 | 33.15 | 6.02 | 25.51 | 248 | 0.16 |
| 107 | 8.18 | 33.71 | 3.52 | 177 | 75 | 8.60 | 33.47 | 4.30 | 26.00 | 201 | 0.22 |
| 159 | 7.70 | 33.96 | 2.64 | 152 | 100 | 8.00 | 33.66 | 3.71 | 26.24 | 178 | 0.27 |
| 210 | 7.18 | 34.04 | 2.07 | 139 | 150 | 7.79 | 33.93 | 2.78 | 26.49 | 155 | 0.35 |
| 266 | 6.52 | 34.04 | 1.85 | 130 | 200 | 7.29 | 34.03 | 2.17 | 26.64 | 141 | 0.43 |
| 312 | 6.10 | 34.09 | 1.48 | 122 | 250 | 6.70 | 34.04 | 1.94 | 26.73 | 133 | 0.50 |
| 420 | 5.29 | 34.14 | 0.85 | 108 | 300 | 6.20 | 34.07 | 1.58 | 26.81 | 124 | 0.56 |
| 524 | 4.68 | 34.16 | 0.66 | 100 | 400 | 5.44 | 34.13 | 0.94 | 26.96 | 111 | 0.68 |
| 626 | 4.34 | - | 1.37u | | 500 | 4.78 | 34.15 | 0.69 | 27.05 | 102 | 0.80 |
| 829 | 3.86 | 34.40 | 0.43 | 74 | 600 | 4.42 | 34.20 | | 27.13 | 95 | 0.90 |
| 1036 | 3.42 | 34.49 | 0.65 | 63 | 700 | 4.14 | 34.29 | | 27.23 | 85 | 0.99 |
| 1237 | 3.04 | 34.53 | 0.93 | 57 | 800 | 3.92 | 34.38 | | 27.32 | 76 | 1.08 |
| | | | | | 1000 | 3.50 | 34.48 | 0.59 | 27.44 | 65 | 1.24 |

CREST; July 17, 1952; 1750, 1816 GCT; 36°36'N, 125°45'W; sounding, 2300 fm; wind, 340°, force 6; weather, overcast; sea, very rough; wire angle, 24°, 30°. 60.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.33 | 32.82 | 6.67 | 348 | 0 | 14.33 | 32.82 | 6.67 | 24.46 | 348 | 0.00 |
| 9 | 14.33 | 32.86 | 6.62 | 345 | 10 | 14.33 | 32.86 | 6.62 | 24.49 | 345 | 0.03 |
| 18 | 14.33 | 32.86 | 6.53 | 345 | 20 | 14.33 | 32.86 | 6.52 | 24.49 | 345 | 0.07 |
| 32 | - | 32.85 | 6.49 | | 30 | 10.20 | 32.85 | 6.50 | 25.26 | 272 | 0.10 |
| 50 | 9.93 | 32.98 | 5.88 | 258 | 50 | 9.93 | 32.98 | 5.88 | 25.41 | 258 | 0.15 |
| 64 | 9.24 | 33.06 | 5.23 | 241 | 75 | 8.64 | 33.25 | 4.97 | 25.83 | 218 | 0.21 |
| 78 | 8.62 | 33.29 | 4.93 | 215 | 100 | 8.52 | 33.44 | 4.62 | 25.99 | 202 | 0.27 |
| 101 | 8.48 | 33.44 | 4.56 | 202 | 150 | 7.87 | 33.88 | 3.00 | 26.44 | 160 | 0.36 |
| 124 | 8.03 | 33.73 | 3.45 | 174 | 200 | 7.27 | 34.00 | 2.48 | 26.62 | 143 | 0.43 |
| 153 | 7.85 | 33.90 | 2.94 | 158 | 250 | 6.73 | 34.00 | 2.27 | 26.69 | 136 | 0.51 |
| 205 | 7.20 | 34.00 | 2.46 | 142 | 300 | 6.14 | 34.03 | 2.24 | 26.79 | 127 | 0.57 |
| 263 | 6.58 | 34.00 | 2.24 | 134 | 400 | 5.35 | 34.06 | 1.02 | 26.91 | 115 | 0.70 |
| 312 | 6.03 | 34.04 | 2.24 | 124 | 500 | 4.78 | 34.14 | 0.72 | 27.04 | 103 | 0.81 |
| | | | | | 600 | (4.61) | (34.26) | (0.39) | (27.15) | (92) | (0.92) |
| 382 | 5.53 | 34.05 | 1.06 | 118 | | | | | | | |
| 485 | 4.82 | 34.12 | 0.75 | 105 | | | | | | | |
| 592 | 4.62 | 34.25 | 0.41 | 93 | | | | | | | |

CREST; July 17, 1952; 1213 GCT; 36°17'N, 126°31'W; sounding, 2000 fm; wind, 350°, force 4; weather, overcast; sea, very rough; wire angle, 33°. 60.100

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.04 | 32.71 | 6.03 | 371 | 0 | 15.04 | 32.71 | 6.03 | 24.22 | 371 | 0.00 |
| 8 | 15.08 | 32.75 | 6.03 | 369 | 10 | 15.08 | 32.75 | 6.03 | 24.24 | 369 | 0.04 |
| 21 | 15.08 | 32.74 | 5.96 | 369 | 20 | 15.08 | 32.74 | 5.96 | 24.24 | 369 | 0.07 |
| 45 | 13.61 | 32.70 | 6.26 | 343 | 30 | 14.60 | 32.72 | 6.03 | 24.32 | 361 | 0.11 |
| 64 | 12.04 | 32.74 | 6.21 | 311 | 50 | 13.25 | 32.71 | 6.25 | 24.59 | 335 | 0.18 |
| 84 | 10.60 | 32.77 | 6.16 | 284 | 75 | 11.24 | 32.75 | 6.18 | 25.00 | 296 | 0.26 |
| 122 | 9.25 | 33.14 | 4.90 | 235 | 100 | 10.05 | 32.92 | 5.73 | 25.34 | 264 | 0.33 |
| 159 | 8.62 | 33.52 | 4.09 | 198 | 150 | 8.72 | 33.39 | 4.32 | 25.92 | 209 | 0.45 |
| 202 | 8.43 | 33.83 | 2.92 | 172 | 200 | 8.44 | 33.82 | 3.00 | 26.30 | 173 | 0.55 |
| 237 | 8.17 | 33.94 | 2.36 | 160 | 250 | 8.02 | 33.96 | 2.22 | 26.48 | 156 | 0.63 |
| 317 | 7.31 | 34.05 | 1.71 | 140 | 300 | 7.48 | 34.04 | 1.83 | 26.62 | 143 | 0.71 |
| 396 | 6.50 | 34.09 | 1.25 | 126 | 400 | 6.44 | 34.09 | 1.24 | 26.80 | 126 | 0.85 |
| 471 | 5.72 | 34.11 | - | 116 | 500 | 5.55 | 34.13 | | 26.94 | 112 | 0.97 |
| 627 | 4.87 | 34.23 | 0.56 | 97 | 600 | 5.01 | 34.21 | 0.61 | 27.07 | 100 | 1.08 |
| 804 | 4.14 | 34.32 | 0.36 | 83 | 700 | 4.51 | 34.28 | 0.44 | 27.18 | 89 | 1.19 |
| 996 | 3.77 | 34.42 | 0.51 | 72 | 800 | 4.15 | 34.32 | 0.37 | 27.25 | 83 | 1.28 |
| | | | | | 1000 | (3.76) | (34.42) | (0.52) | (27.37) | (71) | (1.45) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 63.52 | CREST; July 19, 1952; 2210 GCT; 37°19'N, 122°36'W; sounding, 40 fm; wind, 360°, force 1; weather, cloudy; sea, slight; wire angle, 02°. | | | | | | | | | | |
| 0 | 13.79 | 33.19 | 7.11 | 311 | 0 | 13.79 | 33.19 | 7.11 | 24.85 | 311 | 0.00 |
| 10 | 12.50 | 33.23 | 6.45 | 283 | 10 | 12.50 | 33.23 | 6.45 | 25.14 | 283 | 0.03 |
| 20 | 10.32 | 33.40 | 4.89 | 233 | 20 | 10.32 | 33.40 | 4.89 | 25.67 | 233 | 0.06 |
| 30 | 9.81 | 33.46 | 4.36 | 220 | 30 | 9.81 | 33.46 | 4.36 | 25.80 | 220 | 0.08 |
| 50 | 9.19 | 33.78 | 3.06 | 187 | 50 | 9.19 | 33.78 | 3.06 | 26.15 | 187 | 0.12 |
| 63.55 | CREST; July 20, 1952; 0005 GCT; 37°14'N, 122°49.5'W; sounding, 138 fm; wind, 210°, force 1; weather, overcast; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | 12.76 | 33.26 | 4.96 | 286 | 0 | 12.76 | 33.26 | 4.96 | 25.11 | 286 | 0.00 |
| 10 | 11.44 | 33.28 | 4.11 | 261 | 10 | 11.44 | 33.28 | 4.11 | 25.38 | 261 | 0.03 |
| 25 | 10.57 | 33.40 | 4.01 | 237 | 20 | 10.85 | 33.34 | 4.07 | 25.53 | 246 | 0.05 |
| 49 | 9.08 | 33.64 | 2.97 | 196 | 30 | 10.30 | 33.44 | 3.75 | 25.70 | 230 | 0.08 |
| 73 | 9.17 | 33.84 | 2.65 | 182 | 50 | 9.08 | 33.65 | 2.92 | 26.07 | 195 | 0.12 |
| 97 | 8.98 | 33.94 | 2.26 | 172 | 75 | 9.17 | 33.86 | 2.64 | 26.22 | 181 | 0.17 |
| 147 | 8.73 | 33.98 | 1.97 | 165 | 100 | 8.96 | 33.95 | 2.24 | 26.32 | 171 | 0.21 |
| 195 | 8.46 | 34.01 | 1.70 | 159 | 150 | 8.70 | 33.98 | 1.95 | 26.39 | 165 | 0.30 |
| | | | | | 200 | (8.42) | (34.01) | (1.69) | (26.45) | (158) | (0.38) |
| 63.65 | CREST; July 20, 1952; 0537 GCT; 36°53'N, 123°32'W; sounding, 1800 fm; wind, 200°, force 2; weather, overcast; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | 14.60 | 32.83 | 5.40 | 353 | 0 | 14.60 | 32.83 | 5.40 | 24.41 | 353 | 0.00 |
| 10 | 14.39 | 32.78 | 5.62 | 353 | 10 | 14.39 | 32.78 | 5.62 | 24.41 | 353 | 0.04 |
| 20 | 13.40 | 32.87 | 5.75 | 327 | 20 | 13.40 | 32.87 | 5.75 | 24.69 | 327 | 0.07 |
| 35 | 11.18 | 32.79 | 5.80 | 292 | 30 | 11.45 | 32.81 | 5.80 | 25.01 | 295 | 0.10 |
| 49 | 11.11 | 32.88 | 5.64 | 284 | 50 | 11.03 | 32.89 | 5.62 | 25.15 | 282 | 0.16 |
| 63 | 10.20 | - | - | | 75 | 9.20 | 33.04 | 5.09 | 25.57 | 242 | 0.22 |
| 76 | 9.18 | 33.04 | 5.08 | 242 | 100 | 8.58 | 33.31 | 4.50 | 25.88 | 213 | 0.28 |
| 94 | 8.56 | 33.22 | 4.66 | 219 | 150 | 7.94 | 33.81 | 3.25 | 26.37 | 166 | 0.38 |
| 116 | 8.44 | 33.53 | 3.88 | 194 | 200 | 7.64 | 33.99 | 2.44 | 26.55 | 149 | 0.46 |
| 143 | 7.99 | 33.78 | 3.47 | 169 | 250 | 7.22 | 34.06 | 1.99 | 26.67 | 138 | 0.53 |
| 186 | 7.79 | 33.94 | 2.53 | 155 | 300 | 6.91 | 34.10 | 1.50 | 26.74 | 131 | 0.60 |
| 230 | 7.35 | 34.04 | 2.18 | 141 | 400 | 6.18 | 34.18 | 0.81 | 26.90 | 116 | 0.73 |
| 275 | 7.06 | 34.08 | 1.73 | 134 | 500 | 5.40 | 34.21 | 0.54 | 27.02 | 104 | 0.84 |
| 370 | 6.41 | 34.17 | 0.96 | 119 | | | | | | | |
| 465 | 5.63 | 34.20 | 0.62 | 108 | | | | | | | |
| 567 | 5.02 | 34.25 | 0.45 | 97 | | | | | | | |
| 67.50 | CREST; July 20, 1952; 1928 GCT; 36°48.5'N, 121°56.5'W; sounding, 55 fm; wind, 150°, force 3; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 14.86 | 33.53 | 5.38 | 307 | 0 | 14.86 | 33.53 | 5.38 | 24.89 | 307 | 0.00 |
| 11 | 13.40 | 33.53 | 5.13 | 278 | 10 | 14.82 | 33.53 | 5.20 | 24.90 | 306 | 0.03 |
| 21 | 11.14 | 33.58 | 4.49 | 233 | 20 | 11.30 | 33.58 | 4.70 | 25.64 | 236 | 0.06 |
| 31 | 9.74 | 33.55 | 3.60 | 213 | 30 | 9.92 | 33.55 | 3.70 | 25.85 | 215 | 0.08 |
| 50 | 9.32 | 33.71 | 2.94 | 194 | 50 | 9.32 | 33.71 | 2.94 | 26.08 | 194 | 0.12 |
| 75 | 9.08 | 33.85 | 2.44 | 180 | 75 | 9.08 | 33.85 | 2.44 | 26.23 | 180 | 0.17 |
| 67.55 | CREST; July 20, 1952; 1659 GCT; 36°40'N, 122°15.5'W; sounding, 750 fm; wind, 170°, force 3; weather, overcast; sea, slight; wire angle, 12°. | | | | | | | | | | |
| 0 | 14.99 | 33.06 | 5.37 | 344 | 0 | 14.99 | 33.06 | 5.37 | 24.50 | 344 | 0.00 |
| 10 | 14.89 | 33.06 | 5.65 | 342 | 10 | 14.89 | 33.06 | 5.65 | 24.52 | 342 | 0.03 |
| 20 | 11.86 | 32.82 | 5.84 | 302 | 20 | 11.86 | 32.82 | 5.84 | 24.94 | 302 | 0.07 |
| 35 | 10.54 | 32.87 | 5.81 | 276 | 30 | 10.60 | 32.85 | 5.82 | 25.19 | 278 | 0.10 |
| 49 | 9.40 | 32.94 | 5.36 | 252 | 50 | 9.35 | 32.94 | 5.28 | 25.47 | 252 | 0.15 |
| 64 | 8.86 | 33.13 | 4.15 | 230 | 75 | 8.93 | 33.33 | 3.95 | 25.84 | 216 | 0.21 |
| 78 | 8.94 | 33.35 | 3.92 | 215 | 100 | 8.40 | 33.51 | 3.46 | 26.07 | 195 | 0.26 |
| 96 | 8.38 | 33.48 | 3.58 | 197 | 150 | 7.78 | 33.71 | 3.12 | 26.31 | 172 | 0.35 |
| 119 | 8.50 | 33.72 | 3.12 | 181 | 200 | 7.22 | 33.94 | 3.13 | 26.58 | 147 | 0.43 |
| 145 | 7.86 | 33.71 | 3.11 | 173 | 250 | 6.80 | 33.95 | 2.30 | 26.64 | 141 | 0.51 |
| 190 | 7.32 | 33.92 | 3.22 | 150 | 300 | 6.55 | 33.98 | 1.70 | 26.70 | 135 | 0.58 |
| 234 | 6.94 | 33.95 | 2.48 | 143 | 400 | 6.22 | 34.17 | 0.87 | 26.89 | 117 | 0.71 |
| 280 | 6.61 | 33.96 | 1.94 | 138 | 500 | 5.64 | 34.26 | 0.49 | 27.03 | 103 | 0.82 |
| 376 | 6.36 | 34.13 | 1.00 | 122 | | | | | | | |
| 472 | 5.78 | 34.24 | 0.55 | 107 | | | | | | | |
| 575 | 5.36 | 34.31 | 0.38 | 96 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; July 20, 1952; 1102 GCT; 36°18'N, 123°06'W; sounding, 1700 fm; wind, 220°, force 2; weather, overcast; sea, slight; wire angle, 04°. | | | | | | | | | | | 67.65 |
| 0 | 14.62 | 32.79 | 6.16 | 356 | 0 | 14.62 | 32.79 | 6.16 | 24.37 | 356 | 0.00 |
| 10 | 14.67 | 32.80 | 6.16 | 357 | 10 | 14.67 | 32.80 | 6.16 | 24.37 | 357 | 0.04 |
| 20 | 14.65 | 32.78 | 5.49u | 358 | 20 | 14.65 | 32.78 | | 24.36 | 358 | 0.07 |
| 35 | 13.73 | 32.81 | 6.03 | 337 | 30 | 14.60 | 32.80 | 6.08 | 24.38 | 355 | 0.11 |
| 50 | 12.51 | 32.86 | 5.84 | 311 | 50 | 12.51 | 32.86 | 5.84 | 24.85 | 311 | 0.17 |
| 65 | 11.49 | 32.87 | 5.74 | 292 | 75 | 11.00 | 32.88 | 5.55 | 25.15 | 283 | 0.25 |
| 80 | 10.84 | 32.88 | 5.51 | 280 | 100 | 9.65 | 32.98 | 5.09 | 25.46 | 253 | 0.32 |
| 99 | 9.68 | 32.97 | 5.10 | 255 | 150 | 8.61 | 33.62 | 3.49 | 26.12 | 190 | 0.43 |
| 122 | 9.23 | 33.32 | 3.76 | 222 | 200 | 8.16 | 33.95 | 2.39 | 26.45 | 159 | 0.52 |
| 150 | 8.61 | 33.62 | 3.49 | 190 | 250 | 7.39 | 34.02 | 2.19 | 26.61 | 143 | 0.59 |
| 196 | 8.24 | 33.93 | 2.41 | 162 | 300 | 6.99 | 34.01 | 1.48 | 26.66 | 139 | 0.67 |
| 243 | 7.47 | 34.02 | 2.24 | 144 | 400 | 6.29 | 34.13 | 1.10 | 26.85 | 121 | 0.80 |
| 290 | 7.04 | 34.01 | 1.52 | 139 | 500 | 5.30 | 34.13 | 0.69 | 26.97 | 109 | 0.92 |
| 389 | 6.41 | 34.13 | 1.16 | 122 | 600 | (4.92) | (34.26) | | (27.12) | (95) | (1.03) |
| 485 | 5.39 | 34.13 | 0.72 | 110 | | | | | | | |
| 589 | 4.95 | 34.25 | 0.52 | 96 | | | | | | | |
| CREST; July 21, 1952; 0025 GCT; 36°10.5'N, 121°45.5'W; sounding, 205 fm; wind, 200°, force 2; weather, overcast; sea, moderate; wire angle, 05°. | | | | | | | | | | | 70.51 |
| 0 | 13.93 | 33.27 | 5.82 | 307 | 0 | 13.93 | 33.27 | 5.82 | 24.89 | 307 | 0.00 |
| 10 | 13.13 | 33.52 | 5.44 | 274 | 10 | 13.13 | 33.52 | 5.44 | 25.24 | 274 | 0.03 |
| 25 | 10.46 | 33.33 | 4.98 | 240 | 20 | 10.70 | 33.39 | 5.16 | 25.60 | 240 | 0.05 |
| 49 | 10.02 | 33.61 | 3.58 | 213 | 30 | 10.46 | 33.34 | 4.50 | 25.60 | 240 | 0.08 |
| 73 | 9.48 | 33.77 | 3.09 | 192 | 50 | 10.00 | 33.62 | 3.54 | 25.90 | 211 | 0.12 |
| 97 | 9.30 | 33.82 | 2.66 | 186 | 75 | 9.46 | 33.78 | 3.08 | 26.11 | 191 | 0.17 |
| 149 | 8.70 | 33.96 | 1.85 | 166 | 100 | 9.25 | 33.83 | 2.58 | 26.18 | 184 | 0.22 |
| 197 | 8.32 | 34.01 | 1.66 | 157 | 150 | 8.69 | 33.96 | 1.84 | 26.37 | 166 | 0.31 |
| 244 | 7.87 | 34.09 | 1.50 | 145 | 200 | 8.29 | 34.02 | 1.65 | 26.48 | 156 | 0.39 |
| 291 | 7.69 | 34.14 | 1.21 | 138 | 250 | 7.84 | 34.10 | 1.46 | 26.61 | 143 | 0.47 |
| 347 | 7.39 | 34.18 | 1.13 | 131 | 300 | 7.64 | 34.15 | 1.19 | 26.68 | 137 | 0.54 |
| CREST; July 21, 1952; 0448 GCT; 35°53'N, 122°23'W; sounding, 1800 fm; wind, 280°, force 2; weather, overcast; sea, slight; wire angle, 08°. | | | | | | | | | | | 70.60 |
| 0 | 15.21 | 32.79 | 4.90 | 369 | 0 | 15.21 | 32.79 | 4.90 | 24.25 | 369 | 0.00 |
| 9 | 15.00 | 32.79 | 4.96 | 364 | 10 | 14.98 | 32.79 | 4.97 | 24.30 | 364 | 0.04 |
| 19 | 14.39 | 32.81 | 5.33 | 350 | 20 | 14.37 | 32.81 | 5.33 | 24.44 | 350 | 0.07 |
| 34 | 12.71 | 32.83 | 5.31 | 317 | 30 | 13.25 | 32.83 | 5.32 | 24.69 | 327 | 0.11 |
| 50 | 11.36 | 32.83 | 5.42 | 292 | 50 | 11.36 | 32.83 | 5.42 | 25.04 | 292 | 0.17 |
| 63 | 10.35 | 32.91 | 4.83 | 270 | 75 | 9.65 | 32.99 | 4.73 | 25.46 | 253 | 0.24 |
| 78 | 9.57 | 33.01 | 4.66 | 250 | 100 | 9.22 | 33.26 | 3.81 | 25.74 | 226 | 0.30 |
| 97 | 9.24 | 33.24 | 3.86 | 228 | 150 | 8.39 | 33.73 | 3.03 | 26.24 | 179 | 0.40 |
| 121 | 8.70 | 33.48 | 3.49 | 202 | 200 | 8.20 | 34.02 | 2.02 | 26.50 | 155 | 0.48 |
| 149 | 8.40 | 33.72 | 3.04 | 180 | 250 | 7.53 | 34.09 | 1.72 | 26.65 | 140 | 0.56 |
| 194 | 8.25 | 34.01 | 2.10 | 156 | 300 | 6.96 | 34.15 | 1.20 | 26.78 | 128 | 0.63 |
| 241 | 7.64 | 34.08 | 1.81 | 142 | 400 | 6.30 | 34.21 | 0.75 | 26.91 | 115 | 0.76 |
| 287 | 7.09 | 34.14 | 1.29 | 130 | 500 | 5.88 | 34.27 | 0.47 | 27.01 | 105 | 0.87 |
| 385 | 6.34 | 34.20 | 0.80 | 116 | 600 | (5.24) | (34.32) | | (27.13) | (94) | (0.98) |
| 482 | 5.97 | 34.26 | 0.51 | 107 | | | | | | | |
| 585 | 5.34 | 34.31 | 0.36 | 96 | | | | | | | |

| | OBSERVED | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 70.70 | CREST; July 21, 1952; 1053 GCT; 35°33'N, 123°05'W; sounding, 2000 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 17°. | | | | | | | | | | | |
| | 0 | 14.67 | 32.90 | 5.40 | 349 | 0 | 14.67 | 32.90 | 5.40 | 24.45 | 349 | 0.00 |
| | 10 | 14.57 | 32.97 | 5.66 | 342 | 10 | 14.57 | 32.97 | 5.66 | 24.52 | 342 | 0.03 |
| | 26 | 13.00 | 32.95 | 5.65 | 313 | 20 | 13.00 | 32.94 | 5.65 | 24.82 | 314 | 0.07 |
| | 49 | 12.09 | 33.24 | 5.57 | 275 | 30 | 13.10 | 33.00 | 5.64 | 24.85 | 311 | 0.10 |
| | 72 | 10.56 | 33.43 | 4.61 | 235 | 50 | 12.08 | 33.24 | 5.55 | 25.23 | 275 | 0.16 |
| | 94 | 9.38 | 33.56 | 3.88 | 206 | 75 | 10.25 | 33.45 | 4.52 | 25.72 | 228 | 0.22 |
| | 141 | 8.62 | 33.81 | 2.75 | 176 | 100 | 8.80 | 33.57 | 3.71 | 26.05 | 197 | 0.27 |
| | 185 | 8.00 | 34.00 | 2.34 | 153 | 150 | 8.56 | 33.80 | 2.63 | 26.27 | 176 | 0.37 |
| | 228 | 7.64 | 34.00 | 2.14 | 148 | 200 | 7.88 | 34.00 | 2.28 | 26.53 | 151 | 0.45 |
| | 272 | 7.10 | 34.06 | 1.78 | 136 | 250 | 7.38 | 34.03 | 1.99 | 26.62 | 142 | 0.53 |
| | 362 | 6.34 | 34.12 | 1.06 | 122 | 300 | 6.83 | 34.08 | 1.55 | 26.74 | 131 | 0.60 |
| | 449 | 5.91 | 34.24 | 0.59 | 108 | 400 | 6.15 | 34.19 | 0.81 | 26.92 | 115 | 0.73 |
| | 541 | 5.26 | 34.25 | 0.44 | 100 | 500 | 5.52 | 34.25 | 0.49 | 27.04 | 103 | 0.84 |
| | 721 | 4.71 | 34.38 | 0.38 | 84 | 600 | 5.07 | 34.29 | 0.41 | 27.13 | 95 | 0.95 |
| | 904 | 4.02 | 34.43 | 0.50 | 73 | 700 | 4.78 | 34.37 | 0.38 | 27.22 | 86 | 1.04 |
| | 1101 | 3.45 | - | - | | 800 | 4.40 | 34.41 | 0.40 | 27.30 | 79 | 1.13 |
| | | | | | | 1000 | 3.70 | (34.44) | | (27.39) | (69) | (1.30) |
| 70.80 | CREST; July 21, 1952; 1650 GCT; 35°13'N, 123°47'W; sounding, 2350 fm; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 03°. | | | | | | | | | | | |
| | 0 | 15.15 | 32.99 | 5.60 | 353 | 0 | 15.15 | 32.99 | 5.60 | 24.41 | 353 | 0.00 |
| | 10 | 15.12 | 33.00 | 5.53 | 351 | 10 | 15.12 | 33.00 | 5.53 | 24.43 | 351 | 0.04 |
| | 20 | 15.09 | 32.84u | 5.26 | | 20 | 15.09 | 33.00 | 5.26 | 24.43 | 351 | 0.07 |
| | 35 | 14.65 | 32.83 | 5.14 | 354 | 30 | 15.00 | 32.96 | 5.18 | 24.42 | 352 | 0.11 |
| | 50 | 13.14 | 32.86 | 5.81 | 322 | 50 | 13.14 | 32.86 | 5.81 | 24.73 | 322 | 0.17 |
| | 65 | 11.91 | 32.84 | 5.49 | 301 | 75 | 11.50 | 32.89 | 5.54 | 25.07 | 290 | 0.25 |
| | 80 | 11.20 | 32.90 | 5.54 | 285 | 100 | 10.23 | 32.93 | 5.11 | 25.32 | 266 | 0.32 |
| | 99 | 10.28 | 32.93 | 5.14 | 267 | 150 | 8.80 | 33.46 | 3.78 | 25.97 | 205 | 0.44 |
| | 122 | 9.63 | 33.06 | 4.83 | 247 | 200 | 8.03 | 33.86 | 3.41 | 26.40 | 164 | 0.53 |
| | 149 | 8.80 | 33.46 | 3.80 | 205 | 250 | 7.80 | 34.03 | 2.14 | 26.56 | 148 | 0.61 |
| | 195 | 8.08 | 33.83 | 3.46 | 167 | 300 | 7.10 | 34.06 | 2.08 | 26.69 | 136 | 0.69 |
| | 243 | 7.90 | 34.02 | 2.15 | 150 | 400 | 6.21 | 34.15 | 1.01 | 26.88 | 118 | 0.82 |
| | 290 | 7.21 | 34.05 | 2.11 | 139 | 500 | 5.69 | 34.23 | 0.61 | 27.00 | 106 | 0.94 |
| | 390 | 6.27 | 34.14 | 1.05 | 120 | 600 | (5.13) | (34.27) | (0.33) | (27.10) | (97) | (1.04) |
| | 486 | 5.76 | 34.22 | 0.67 | 108 | | | | | | | |
| | 590 | 5.20 | 34.27 | 0.34 | 98 | | | | | | | |
| 70.90 | CREST; July 21, 1952; 2209 GCT; 34°53'N, 124°30'W; sounding, 2200 fm; wind, 260°, force 2; weather, overcast; sea, rough; wire angle, 12°. | | | | | | | | | | | |
| | 0 | 15.99 | 32.95 | 4.74 | 373 | 0 | 15.99 | 32.95 | 4.74 | 24.20 | 373 | 0.00 |
| | 10 | 15.72 | 32.95 | 4.68 | 368 | 10 | 15.72 | 32.95 | 4.68 | 24.26 | 368 | 0.04 |
| | 25 | 15.71 | 32.95 | 5.11 | 367 | 20 | 15.71 | 32.95 | 5.09 | 24.26 | 367 | 0.07 |
| | 49 | 12.85 | 32.99 | 5.03 | 307 | 30 | 15.70 | 32.95 | 5.10 | 24.26 | 367 | 0.11 |
| | 74 | 10.72 | 32.88 | 4.56 | 278 | 50 | 12.75 | 32.99 | 5.02 | 24.91 | 306 | 0.18 |
| | 98 | 9.57 | 33.06 | 4.24 | 246 | 75 | 10.65 | 32.89 | 4.54 | 25.22 | 276 | 0.25 |
| | 150 | 8.56 | 33.66 | 3.53 | 186 | 100 | 9.53 | 33.10 | 4.21 | 25.57 | 243 | 0.32 |
| | 196 | 7.86 | 33.94 | 2.72 | 156 | 150 | 8.56 | 33.66 | 3.53 | 26.16 | 186 | 0.42 |
| | 243 | 7.28 | 33.99 | 2.46 | 144 | 200 | 7.80 | 33.95 | 2.69 | 26.50 | 154 | 0.51 |
| | 288 | 6.84 | 34.03 | 1.97 | 135 | 250 | 7.22 | 34.00 | 2.42 | 26.62 | 142 | 0.59 |
| | 384 | 5.95 | 34.11 | 1.25 | 118 | 300 | 6.72 | 34.04 | 1.86 | 26.72 | 133 | 0.66 |
| | 475 | 5.54 | 34.21 | 0.68 | 106 | 400 | 5.87 | 34.13 | 1.14 | 26.90 | 116 | 0.79 |
| | 571 | 4.95 | 34.23 | 0.51 | 98 | 500 | 5.39 | 34.22 | 0.62 | 27.03 | 104 | 0.90 |
| | 764 | 4.29 | 34.35 | 0.32 | 82 | 600 | 4.84 | 34.24 | 0.47 | 27.11 | 96 | 1.01 |
| | 959 | 3.78 | 34.42 | 0.42 | 72 | 700 | 4.48 | 34.31 | 0.35 | 27.21 | 87 | 1.11 |
| | | | | | | 800 | 4.18 | 34.37 | 0.33 | 27.29 | 79 | 1.20 |
| | | | | | | 1000 | (3.67) | (34.43) | (0.48) | (27.39) | (70) | (1.36) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | $\Delta D$<br>dyn m |

CREST; July 10, 1952; 2137 GCT; 35°39'N, 121°20'W; sounding, 50 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 02°. 73.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.56 | 33.63 | 5.71 | 237 | 0 | 11.56 | 33.63 | 5.71 | 25.63 | 237 | 0.00 |
| 10 | 10.96 | 33.69 | 5.50 | 222 | 10 | 10.96 | 33.69 | 5.50 | 25.78 | 222 | 0.02 |
| 20 | 10.63 | 33.67 | 4.75 | 218 | 20 | 10.63 | 33.67 | 4.75 | 25.83 | 218 | 0.05 |
| 30 | 10.32 | 33.69 | 4.41 | 211 | 30 | 10.32 | 33.69 | 4.41 | 25.90 | 211 | 0.07 |
| 50 | 9.83 | 33.72 | 3.91 | 201 | 50 | 9.83 | 33.72 | 3.91 | 26.00 | 201 | 0.11 |
| 75 | 9.08 | 33.86 | 2.67 | 179 | 75 | 9.08 | 33.86 | 2.67 | 26.23 | 179 | 0.16 |

CREST; July 10, 1952; 1535, 1551 GCT; 35°20.5'N, 122°03'W; sounding, 1520 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 03°, 02°. 73.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.01 | 33.29 | 6.51 | 328 | 0 | 15.01 | 33.29 | 6.51 | 24.67 | 328 | 0.00 |
| 10 | 15.02 | 33.31 | 6.46 | 327 | 10 | 15.02 | 33.31 | 6.46 | 24.69 | 327 | 0.03 |
| 20 | 13.05 | 33.49 | 6.55 | 274 | 20 | 13.05 | 33.49 | 6.55 | 25.23 | 274 | 0.06 |
| 35 | - | 33.51 | 5.89 | | 30 | 12.18 | 33.51 | 6.25 | 25.42 | 257 | 0.09 |
| 50 | 9.65 | 33.35 | 4.60 | 226 | 50 | 9.65 | 33.35 | 4.60 | 25.74 | 226 | 0.14 |
| 65 | 9.51 | 33.62 | 3.90 | 204 | 75 | 9.38 | 33.67 | 3.58 | 26.04 | 198 | 0.19 |
| | | | | | 100 | 8.83 | 33.86 | 2.99 | 26.27 | 176 | 0.24 |
| 79 | 9.30 | 33.69 | 3.49 | 195 | 150 | 8.22 | 33.97 | 2.53 | 26.45 | 159 | 0.32 |
| 98 | 8.87 | 33.86 | 3.04 | 176 | 200 | 7.69 | 34.04 | 1.98 | 26.59 | 146 | 0.40 |
| 122 | 8.58 | 33.86 | 2.77 | 172 | 250 | 7.09 | 34.05 | 1.45 | 26.68 | 137 | 0.47 |
| 147 | 8.26 | 33.95 | 2.57 | 161 | 300 | 6.66 | 34.09 | 1.10 | 26.77 | 129 | 0.54 |
| 194 | 7.73 | 34.04 | 2.04 | 146 | 400 | 6.17 | 34.22 | 0.65 | 26.94 | 113 | 0.67 |
| 239 | 7.22 | 34.05 | 1.56 | 139 | 500 | 5.64 | 34.24 | 0.55 | 27.02 | 105 | 0.78 |
| 285 | 6.74 | 34.07 | 1.19 | 131 | 600 | (5.19) | (34.33) | | (27.14) | (93) | (0.89) |
| 384 | 6.26 | 34.22 | 0.70 | 114 | | | | | | | |
| 480 | 5.74 | 34.23 | 0.56 | 107 | | | | | | | |
| 584 | 5.26 | 34.33 | - | 94 | | | | | | | |

CREST; July 10, 1952; 0031 GCT; 35°00.5'N, 120°54'W; sounding, 96 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 16°. 77.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.87 | 33.40 | 6.57 | 297 | 0 | 13.87 | 33.40 | 6.57 | 25.00 | 297 | 0.00 |
| 10 | 12.66 | 33.40 | 7.07 | 274 | 10 | 12.66 | 33.40 | 7.07 | 25.24 | 274 | 0.03 |
| 24 | 11.06 | 33.41 | 5.50 | 245 | 20 | 11.80 | 33.41 | 6.60 | 25.41 | 257 | 0.06 |
| 48 | 10.16 | 33.71 | 4.38 | 207 | 30 | 10.30 | 33.56 | 5.09 | 25.80 | 221 | 0.08 |
| 71 | 8.88 | 33.79 | 3.26 | 182 | 50 | 10.13 | 33.72 | 4.23 | 25.95 | 206 | 0.12 |
| 92 | 8.67 | 33.87 | 2.81 | 172 | 75 | 8.83 | 33.80 | 3.18 | 26.23 | 180 | 0.17 |
| 115 | 8.67 | 33.98 | 2.26 | 164 | 100 | 8.67 | 33.91 | 2.61 | 26.34 | 170 | 0.21 |
| 143 | 8.61 | 34.05 | 1.97 | 158 | 150 | (8.60) | (34.06) | (1.93) | (26.47) | (157) | (0.30) |

CREST; July 10, 1952; 0332 GCT; 34°54.5'N, 121°13'W; sounding, 320 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 12°. 77.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.42 | 33.53 | 6.56 | 278 | 0 | 13.42 | 33.53 | 6.56 | 25.19 | 278 | 0.00 |
| 10 | 12.64 | 33.56 | 7.19 | 262 | 10 | 12.64 | 33.56 | 7.19 | 25.37 | 262 | 0.03 |
| 25 | 10.81 | 33.84 | 5.38 | 209 | 20 | 11.30 | 33.81 | 6.50 | 25.82 | 219 | 0.05 |
| 49 | - | 33.85 | 3.33 | | 30 | 10.80 | 33.85 | 4.69 | 25.94 | 208 | 0.07 |
| 73 | 9.13 | 33.96 | 2.48 | 173 | 50 | 9.50 | 33.85 | 3.23 | 26.16 | 187 | 0.11 |
| 96 | 9.01 | 34.01 | 2.29 | 167 | 75 | 9.12 | 33.97 | 2.44 | 26.31 | 172 | 0.16 |
| 146 | 8.80 | 34.05 | 2.29 | 161 | 100 | 9.00 | 34.02 | 2.28 | 26.37 | 166 | 0.20 |
| 191 | 8.41 | 34.12 | 1.82 | 150 | 150 | 8.77 | 34.05 | 2.26 | 26.43 | 161 | 0.28 |
| 235 | 8.28 | 34.15 | 1.66 | 146 | 200 | 8.37 | 34.13 | 1.77 | 26.56 | 149 | 0.36 |
| 280 | 8.00 | 34.21 | 1.51 | 138 | 250 | 8.21 | 34.17 | 1.62 | 26.61 | 144 | 0.44 |
| 331 | 7.46 | 34.21 | 1.35 | 130 | 300 | 7.80 | 34.21 | 1.46 | 26.70 | 135 | 0.51 |
| 378 | 7.13 | 34.24 | 0.89 | 123 | 400 | 6.70 | 34.22 | 0.87 | 26.87 | 119 | 0.64 |
| 426 | 6.20 | 34.20 | 0.86 | 115 | 500 | (6.17) | (34.27) | | (26.98) | (109) | (0.76) |
| 477 | 6.18 | 34.25 | 0.58 | 111 | | | | | | | |

SIO
CCOFI
5207

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **7765** | CREST; July 10, 1952; 0930 GCT; 34°34'N, 121°55'W; sounding, 2000 fm; wind, 300°, force 3; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 14.99 | 33.48 | 6.54 | 313 | 0 | 14.99 | 33.48 | 6.54 | 24.82 | 313 | 0.00 |
| 10 | 14.96 | 33.48 | 6.69 | 313 | 10 | 14.96 | 33.48 | 6.69 | 24.83 | 313 | 0.03 |
| 20 | 14.45 | 33.48 | 6.60 | 302 | 20 | 14.45 | 33.48 | 6.60 | 24.94 | 302 | 0.06 |
| 35 | - | 33.53 | 6.00 | | 30 | 13.70 | 33.52 | 6.20 | 25.13 | 285 | 0.09 |
| 50 | 9.97 | 33.30 | 5.35 | 235 | 50 | 9.97 | 33.30 | 5.35 | 25.65 | 235 | 0.14 |
| 65 | 9.31 | 33.29 | 4.91 | 225 | 75 | 9.04 | 33.37 | 4.35 | 25.86 | 215 | 0.20 |
| 80 | 8.97 | 33.49 | 4.10 | 205 | 100 | 8.86 | 33.72 | 3.31 | 26.16 | 186 | 0.25 |
| 98 | 8.88 | 33.71 | 3.38 | 187 | 150 | 8.42 | 33.98 | 2.27 | 26.43 | 161 | 0.34 |
| 122 | 8.56 | 33.80 | 3.04 | 176 | 200 | 7.77 | 34.03 | 2.17 | 26.57 | 148 | 0.42 |
| 150 | 8.42 | 33.98 | 2.27 | 161 | 250 | 7.22 | 34.04 | 1.71 | 26.65 | 140 | 0.49 |
| 195 | 7.84 | 34.03 | 2.19 | 149 | 300 | 6.96 | 34.13 | 1.69 | 26.76 | 129 | 0.56 |
| 241 | 7.28 | 34.03 | 1.70 | 141 | 400 | 6.09 | 34.16 | 0.68 | 26.90 | 116 | 0.69 |
| 288 | 7.04 | 34.12 | 1.74 | 131 | 500 | 5.47 | 34.24 | 0.50 | 27.04 | 103 | 0.80 |
| 386 | 6.20 | 34.15 | 0.74 | 118 | 600 | (4.89) | (34.24) | | (27.11) | (96) | (0.91) |
| 482 | 5.57 | 34.24 | 0.52 | 104 | | | | | | | |
| 586 | 4.98 | 34.24 | 0.35 | 97 | | | | | | | |
| **8051** | CREST; July 23, 1952; 1756 GCT; 34°25'N, 120°32.5'W; sounding, 70 fm; wind, 330°, force 3; weather, fog; sea, slight; wire angle, 04°. | | | | | | | | | | |
| 0 | 11.43 | 33.72 | 4.30 | 228 | 0 | 11.43 | 33.72 | 4.30 | 25.72 | 228 | 0.00 |
| 10 | 11.34 | 33.73 | 4.42 | 226 | 10 | 11.34 | 33.73 | 4.42 | 25.75 | 226 | 0.02 |
| 20 | 10.94 | 33.72 | 3.72 | 220 | 20 | 10.94 | 33.72 | 3.72 | 25.81 | 220 | 0.04 |
| 30 | 9.86 | 33.80 | 3.04 | 196 | 30 | 9.86 | 33.80 | 3.04 | 26.06 | 196 | 0.07 |
| 50 | 9.38 | 33.86 | 2.22 | 184 | 50 | 9.38 | 33.86 | 2.22 | 26.19 | 184 | 0.10 |
| 75 | 9.18 | 33.90 | 2.21 | 178 | 75 | 9.18 | 33.90 | 2.21 | 26.25 | 178 | 0.15 |
| **8055** | CREST; July 23, 1952; 1553 GCT; 34°19'N, 120°48'W; sounding, 350 fm; wind, 330°, force 3; weather, overcast; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 12.08 | 33.63 | 5.53 | 246 | 0 | 12.08 | 33.63 | 5.53 | 25.53 | 246 | 0.00 |
| 10 | 11.74 | 33.64 | 5.19 | 239 | 10 | 11.74 | 33.64 | 5.19 | 25.60 | 239 | 0.02 |
| 25 | 11.28 | 33.68 | 5.65 | 228 | 20 | 11.45 | 33.67 | 5.64 | 25.68 | 232 | 0.05 |
| 50 | 9.53 | 33.78 | 3.53 | 192 | 30 | 10.94 | 33.70 | 5.60 | 25.79 | 221 | 0.07 |
| 74 | 9.42 | 33.83 | 3.06 | 187 | 50 | 9.53 | 33.78 | 3.53 | 26.10 | 192 | 0.11 |
| 98 | 9.21 | 33.90 | 2.54 | 178 | 75 | 9.40 | 33.83 | 3.05 | 26.16 | 186 | 0.16 |
| 148 | 9.00 | 33.99 | 2.19 | 168 | 100 | 9.19 | 33.91 | 2.52 | 26.26 | 177 | 0.21 |
| 196 | 8.76 | 34.04 | 2.02 | 161 | 150 | 8.98 | 33.99 | 2.17 | 26.35 | 168 | 0.29 |
| 241 | 8.54 | 34.16 | 1.58 | 149 | 200 | 8.75 | 34.05 | 2.00 | 26.43 | 160 | 0.38 |
| 289 | 8.17 | 34.15 | 1.55 | 144 | 250 | 8.49 | 34.16 | 1.57 | 26.56 | 148 | 0.46 |
| 341 | 7.70 | 34.21 | 0.99 | 133 | 300 | 8.07 | 34.16 | 1.52 | 26.62 | 142 | 0.53 |
| 389 | 7.32 | 34.21 | 0.81 | 128 | 400 | 7.25 | 34.21 | 0.79 | 26.78 | 127 | 0.67 |
| 439 | 6.95 | 34.20 | 0.65 | 124 | 500 | (6.45) | (34.20) | (0.42) | (26.88) | (118) | (0.80) |
| 489 | 6.54 | 34.20 | 0.43 | 119 | | | | | | | |
| **8060** | CREST; July 23, 1952; 1303 GCT; 34°03'N, 121°05'W; sounding, 500 fm; wind, 300°, force 3; weather, overcast; sea, slight; wire angle, 15°. | | | | | | | | | | |
| 0 | 13.19 | 33.55 | 4.95 | 273 | 0 | 13.19 | 33.55 | 4.95 | 25.25 | 273 | 0.00 |
| 10 | 13.19 | 33.55 | 5.38 | 273 | 10 | 13.19 | 33.55 | 5.38 | 25.25 | 273 | 0.03 |
| 19 | 13.05 | 33.58 | 5.23 | 268 | 20 | 13.03 | 33.58 | 5.22 | 25.31 | 267 | 0.05 |
| 34 | 12.64 | 33.59 | 5.07 | 259 | 30 | 12.82 | 33.59 | 5.10 | 25.36 | 263 | 0.08 |
| 48 | 11.59 | 33.48 | 4.63 | 249 | 50 | 10.70 | 33.48 | 4.20 | 25.67 | 233 | 0.13 |
| 62 | 10.09 | 33.55 | 3.54 | 218 | 75 | 9.92 | 33.62 | 3.81 | 25.91 | 210 | 0.19 |
| 76 | 9.91 | 33.62 | 3.81 | 210 | 100 | 9.35 | 33.70 | 3.15 | 26.07 | 195 | 0.24 |
| 95 | 9.50 | 33.68 | 3.29 | 199 | 150 | 8.68 | 33.93 | 2.49 | 26.35 | 168 | 0.33 |
| 118 | 8.95 | 33.75 | 2.80 | 186 | 200 | 8.59 | 34.10 | 1.81 | 26.50 | 154 | 0.41 |
| 146 | 8.70 | 33.92 | 2.52 | 169 | 250 | 7.89 | 34.20 | 1.09 | 26.68 | 137 | 0.49 |
| 190 | 8.65 | 34.07 | 1.99 | 157 | 300 | 7.39 | 34.21 | 0.91 | 26.76 | 129 | 0.56 |
| 235 | 7.98 | 34.18 | 1.23 | 139 | 400 | 6.49 | 34.16 | 0.88 | 26.85 | 121 | 0.69 |
| 281 | 7.62 | 34.22 | 0.90 | 132 | 500 | 6.26 | 34.25 | 0.42 | 26.95 | 112 | 0.81 |
| 376 | 6.56 | 34.14 | 0.97 | 124 | | | | | | | |
| 473 | 6.36 | 34.24 | 0.46 | 114 | | | | | | | |
| 576 | 5.84 | 34.25 | 0.40 | 106 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; July 23, 1952; 0656, 0730 GCT; 33°43'N, 121°52'W; sounding, 1900 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 17°, 20°. 80.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.88 | 32.93 | 5.62 | 372 | 0 | 15.88 | 32.93 | 5.62 | 24.21 | 372 | 0.00 |
| 9 | 15.88 | 32.92 | 5.32 | 373 | 10 | 15.87 | 32.92 | 5.33 | 24.20 | 373 | 0.04 |
| 19 | 15.81 | 32.92 | 5.38 | 372 | 20 | 15.80 | 32.92 | 5.36 | 24.22 | 371 | 0.07 |
| 33 | 14.74 | 32.90 | 5.33 | 351 | 30 | 14.87 | 32.90 | 5.34 | 24.40 | 353 | 0.11 |
| 47 | 13.93 | 33.06 | 5.23 | 323 | 50 | 13.58 | 33.07 | 5.23 | 24.80 | 315 | 0.18 |
| 60 | 12.69 | 33.07 | 5.22 | 299 | 75 | 11.52 | 33.14 | 4.10 | 25.26 | 272 | 0.25 |
| 73 | 11.60 | 33.13 | 4.20 | 274 | 100 | 9.61 | 33.40 | 3.49 | 25.79 | 222 | 0.31 |
| 90 | 10.22 | 33.29 | 3.57 | 239 | 150 | 8.62 | 33.68 | 3.25 | 26.17 | 186 | 0.42 |
| 111 | 9.30 | 33.52 | 3.45 | 208 | 200 | 8.25 | 33.92 | 2.65 | 26.41 | 163 | 0.51 |
| 180 | 8.32 | 33.80 | 3.02 | 173 | 250 | 7.79 | 34.06 | 1.83 | 26.59 | 146 | 0.58 |
| 224 | 8.11 | 34.03 | 2.03 | 152 | 300 | 7.27 | 34.09 | 1.47 | 26.69 | 136 | 0.66 |
| 268 | 7.58 | 34.07 | 1.72 | 142 | 400 | 6.23 | 34.14 | 0.83 | 26.87 | 119 | 0.79 |
| 363 | 6.61 | 34.14 | 1.00 | 124 | 500 | 5.50 | 34.16 | 0.53 | 26.97 | 109 | 0.91 |
| 457 | 5.75 | 34.14 | 0.62 | 114 | | | | | | | |
| 554 | 5.30 | 34.20 | 0.43 | 104 | | | | | | | |

CREST; July 23, 1952; 0040 GCT;[a] 33°25'N, 123°14'W; sounding, 2200 fm; wind, 290°, force 3; weather, overcast; sea, moderate; wire angle, 04°. 80.80

| | | | | |
|---|---|---|---|---|
| 0 | 16.92 | 33.13 | | 380 |
| 10 | 16.55 | 33.12 | | 373 |
| 25 | 16.47 | 33.12 | | 371 |
| 50 | 13.67 | 33.09 | | 316 |
| 74 | 12.68 | 33.11 | | 295 |
| 98 | 11.09 | 33.21 | | 260 |
| 121 | 9.76 | 33.39 | | 225 |
| 145 | 9.13 | 33.61 | | 199 |
| 169 | 8.67 | 33.77 | | 180 |
| 193 | 8.45 | 33.91 | | 166 |
| 217 | 8.16 | 33.97 | | 158 |
| 241 | 7.88 | 34.04 | | 149 |
| 261 | 7.62 | 34.06 | | 143 |
| 271 | 7.60 | 34.03 | | |
| 291 | 7.54 | 34.09 | | 140 |

CREST; July 23, 1952; 0134 GCT; 33°25'N, 122°35'W; sounding, 2200 fm; wind, 290°, force 3; weather, overcast; sea, moderate; wire angle, 12°. 80.80

| | | | | | |
|---|---|---|---|---|---|
| 0 | 16.86 | 5.44 | 0 | 16.86 | 5.44 |
| 10 | 16.56 | 5.11 | 10 | 16.56 | 5.11 |
| 25 | 16.53 | 5.03 | 20 | 16.54 | 5.06 |
| 49 | 15.26 | 4.95 | 30 | 16.50 | 5.02 |
| 72 | 12.72 | 5.50 | 50 | 15.08 | 4.96 |
| 96 | 11.21 | 4.43 | 75 | 12.55 | 5.49 |
| 145 | 8.87 | 3.27 | 100 | 10.70 | 4.29 |
| 191 | 8.44 | 2.74 | 150 | 8.82 | 3.23 |
| 236 | 7.88 | 2.25 | 200 | 8.32 | 2.64 |
| 280 | 7.53 | 1.85 | 250 | 7.75 | 2.13 |
| 378 | 6.47 | 1.14 | 300 | 7.34 | 1.70 |
| 467 | 6.08 | 0.59 | 400 | 6.37 | 0.98 |
| 562 | 5.44 | 0.41 | 500 | 5.84 | 0.51 |
| 748 | 4.63 | 0.33 | 600 | 5.24 | 0.40 |
| 933 | 4.04 | 0.39 | 700 | 4.81 | 0.36 |
| 1131 | 3.50 | 0.69 | 800 | 4.46 | 0.34 |
| | | | 1000 | 3.85 | 0.46 |

a) Bathythermograph calibration cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

80.90 CREST; July 22, 1952; 1849 GCT; 33°09'N, 123°14'W; sounding, 2000 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.00 | 33.22 | 5.61 | 376 | 0 | 17.00 | 33.22 | 5.61 | 24.17 | 376 | 0.00 |
| 10 | 16.97 | 33.21 | 5.75 | 376 | 10 | 16.97 | 33.21 | 5.75 | 24.17 | 376 | 0.04 |
| 20 | 16.85 | 33.21 | 5.56 | 373 | 20 | 16.85 | 33.21 | 5.56 | 24.20 | 373 | 0.08 |
| 35 | 16.33 | 33.13 | 5.47 | 367 | 30 | 16.70 | 33.17 | 5.49 | 24.20 | 373 | 0.11 |
| 49 | 14.25 | 33.01 | 5.77 | 333 | 50 | 14.10 | 33.00 | 5.81 | 24.64 | 331 | 0.18 |
| 64 | 12.92 | 32.93 | 5.92 | 313 | 75 | 12.90 | 32.96 | 5.67 | 24.85 | 311 | 0.26 |
| 78 | 12.62 | 32.98 | 5.65 | 304 | 100 | 11.65 | 33.02 | 5.32 | 25.14 | 283 | 0.34 |
| 97 | 11.94 | 33.01 | 5.38 | 289 | 150 | 9.13 | 33.37 | 4.00 | 25.84 | 216 | 0.46 |
| 120 | 10.21 | 33.11 | 4.83 | 253 | 200 | 8.58 | 33.88 | 2.83 | 26.33 | 170 | 0.56 |
| 148 | 9.18 | 33.31 | 4.08 | 222 | 250 | 8.04 | 34.00 | 2.29 | 26.50 | 154 | 0.65 |
| 193 | 8.64 | 33.85 | 2.94 | 174 | 300 | 7.48 | 34.05 | 1.94 | 26.62 | 142 | 0.72 |
| 240 | 8.18 | 33.99 | 2.38 | 156 | 400 | 6.38 | 34.12 | 1.10 | 26.83 | 123 | 0.86 |
| 286 | 7.62 | 34.04 | 2.03 | 145 | 500 | 5.50 | 34.19 | 0.74 | 27.00 | 107 | 0.98 |
| 384 | 6.55 | 34.11 | 1.20 | 126 | 600 | (5.08) | (34.28) | | (27.12) | (96) | (1.09) |
| 480 | 5.62 | 34.17 | 0.80 | 110 | | | | | | | |
| 582 | 5.12 | 34.26 | 0.45 | 97 | | | | | | | |

80.100 CREST; July 22, 1952; 1320 GCT; 32°49'N, 123°54'W; sounding, 2240 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.65 | 33.30 | 5.00 | 385 | 0 | 17.65 | 33.30 | 5.00 | 24.08 | 385 | 0.00 |
| 10 | 17.64 | 33.31 | 5.48 | 384 | 10 | 17.64 | 33.31 | 5.48 | 24.09 | 384 | 0.04 |
| 25 | 17.62 | 33.56 | 5.39 | 365 | 20 | 17.63 | 33.54 | 5.42 | 24.27 | 367 | 0.08 |
| 50 | 15.18 | 33.30 | 5.08 | 331 | 30 | 17.60 | 33.55 | 5.35 | 24.28 | 365 | 0.11 |
| 74 | 14.13 | 33.21 | 5.41 | 316 | 50 | 15.18 | 33.30 | 5.08 | 24.64 | 331 | 0.18 |
| 98 | 12.60 | 33.12 | 5.47 | 293 | 75 | 14.07 | 33.21 | 5.42 | 24.81 | 315 | 0.26 |
| 149 | 9.65 | 33.30 | 4.21 | 230 | 100 | 12.30 | 33.12 | 5.46 | 25.09 | 288 | 0.34 |
| 195 | 8.52 | 33.69 | 4.21 | 184 | 150 | 9.59 | 33.31 | 4.21 | 25.72 | 228 | 0.47 |
| 240 | 7.96 | 33.92 | 3.27 | 159 | 200 | 8.45 | 33.72 | 4.19 | 26.22 | 180 | 0.57 |
| 287 | 7.38 | 34.05 | 2.85 | 141 | 250 | 7.83 | 33.96 | 3.15 | 26.50 | 154 | 0.66 |
| 384 | 6.26 | 34.04 | 1.82 | 127 | 300 | 7.22 | 34.05 | 2.76 | 26.66 | 139 | 0.73 |
| 476 | 5.69 | 34.16 | 0.91 | 111 | 400 | 6.13 | 34.05 | 1.65 | 26.81 | 125 | 0.87 |
| 574 | 5.06 | 34.22 | 0.57 | 100 | 500 | 5.54 | 34.17 | 0.79 | 26.98 | 109 | 0.99 |
| 766 | 4.48 | 34.39 | 0.43 | 81 | 600 | 4.96 | 34.24 | 0.53 | 27.10 | 97 | 1.10 |
| 953 | 3.90 | 34.47 | 0.62 | 69 | 700 | 4.63 | 34.34 | 0.45 | 27.22 | 86 | 1.20 |
| 1150 | 3.46 | 34.52 | 0.76 | 61 | 800 | 4.40 | 34.41 | 0.42 | 27.30 | 79 | 1.29 |
| | | | | | 1000 | 3.77 | 34.48 | 0.68 | 27.42 | 67 | 1.45 |

85.38 SPENCER F. BAIRD; July 12, 1952; 1326 GCT; 34°01.5'N, 119°02.5'W; sounding, 292 fm; wind, 040°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.23 | 33.48 | | 242 | 0 | 11.23 | 33.48 | | 25.57 | 242 | 0.00 |
| 10 | 11.05 | 33.48 | | 239 | 10 | 11.05 | 33.48 | | 25.60 | 239 | 0.02 |
| 20 | 10.91 | 33.58 | | 229 | 20 | 10.91 | 33.58 | | 25.71 | 229 | 0.05 |
| 30 | 9.60 | 33.63 | | 204 | 30 | 9.60 | 33.63 | | 25.97 | 204 | 0.07 |
| 50 | 9.38 | 33.78 | | 190 | 50 | 9.38 | 33.78 | | 26.12 | 190 | 0.11 |

85.40 SPENCER F. BAIRD; July 12, 1952; 1145 GCT; 33°57'N, 119°11'W; sounding, 410 fm; wind, 360°, force 2; weather, clear; sea, slight; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.96 | 33.63 | | 262 | 0 | 12.96 | 33.63 | | 25.36 | 262 | 0.00 |
| 10 | 12.02 | 33.69 | | 241 | 10 | 12.02 | 33.69 | | 25.59 | 241 | 0.03 |
| 20 | 11.66 | 33.57 | | 243 | 20 | 11.66 | 33.57 | | 25.56 | 243 | 0.05 |
| 35 | 9.84 | 33.58 | | 212 | 30 | 10.65 | 33.57 | | 25.75 | 226 | 0.07 |
| 50 | 9.46 | 33.72 | | 196 | 50 | 9.46 | 33.72 | | 26.06 | 196 | 0.12 |
| 65 | 9.37 | 33.85 | | 185 | 75 | 9.35 | 33.86 | | 26.19 | 183 | 0.16 |
| 80 | 9.34 | 33.86 | | 183 | 100 | 9.32 | 33.94 | | 26.26 | 177 | 0.21 |
| 99 | 9.33 | 33.94 | | 177 | 150 | 9.17 | 33.96 | | 26.30 | 173 | 0.30 |
| 122 | 9.28 | 33.99 | | 173 | 200 | 8.66 | 34.02 | | 26.43 | 161 | 0.38 |
| 152 | 9.15 | 33.96 | | 173 | 250 | 8.75 | 34.21 | | 26.56 | 148 | 0.46 |
| 200 | 8.66 | 34.02 | | 161 | 300 | 8.53 | 34.23 | | 26.61 | 144 | 0.54 |
| 247 | 8.76 | 34.21 | | 149 | 400 | 7.30 | 34.24 | | 26.80 | 126 | 0.68 |
| 295 | 8.57 | 34.23 | | 144 | 500 | 6.44 | 34.28 | | 26.95 | 112 | 0.80 |
| 396 | 7.34 | 34.24 | | 126 | 600 | (5.79) | (34.31) | | (27.06) | (101) | (0.92) |
| 494 | 6.48 | 34.28 | | 112 | | | | | | | |
| 598 | 5.80 | 34.31 | | 102 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| SPENCER F. BAIRD; July 12, 1952; 0608 GCT; 33°35.5'N, 119°50.5'W; sounding, 200 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 28°. | | | | | | | | | | | 85.50 |
| 0 | 15.55 | 33.41 | | 330 | 0 | 15.55 | 33.41 | | 24.65 | 330 | 0.00 |
| 9 | 12.82 | 33.30 | | 284 | 10 | 12.70 | 33.30 | | 25.16 | 282 | 0.03 |
| 22 | 10.68 | 33.42 | | 237 | 20 | 10.90 | 33.40 | | 25.57 | 243 | 0.06 |
| 44 | 10.17 | 33.51 | | 222 | 30 | 10.48 | 33.46 | | 25.69 | 231 | 0.08 |
| 66 | 9.28 | 33.68 | | 196 | 50 | 9.97 | 33.54 | | 25.84 | 217 | 0.13 |
| 89 | 8.68 | 33.82 | | 176 | 75 | 8.95 | 33.74 | | 26.16 | 186 | 0.18 |
| 136 | 8.46 | 34.07 | | 155 | 100 | 8.62 | 33.88 | | 26.32 | 171 | 0.22 |
| SPENCER F. BAIRD; July 12, 1952; 0119 GCT; 33°18.5'N, 120°26'W; sounding, 580 fm; wind, 320°, force 3; weather, partly cloudy; sea, slight; wire angle, 22°. | | | | | | | | | | | 85.60 |
| 0 | 15.25 | 33.44 | | 322 | 0 | 15.25 | 33.44 | | 24.74 | 322 | 0.00 |
| 9 | 14.78 | 33.51 | | 307 | 10 | 14.75 | 33.52 | | 24.91 | 306 | 0.03 |
| 18 | 13.97 | 33.55 | | 288 | 20 | 13.40 | 33.55 | | 25.21 | 277 | 0.06 |
| 32 | 11.60 | 33.36 | | 258 | 30 | 11.75 | 33.38 | | 25.40 | 259 | 0.09 |
| 46 | 10.92 | 33.33 | | 248 | 50 | 10.88 | 33.34 | | 25.53 | 247 | 0.14 |
| 60 | 10.75 | 33.67 | | 220 | 75 | 9.40 | 33.55 | | 25.94 | 207 | 0.20 |
| 73 | 9.42 | 33.55 | | 208 | 100 | 9.08 | 33.72 | | 26.12 | 190 | 0.25 |
| 91 | 9.26 | 33.66 | | 197 | 150 | 8.45 | 33.98 | | 26.43 | 161 | 0.33 |
| 111 | 8.79 | 33.78 | | 181 | 200 | 7.77 | 34.02 | | 26.56 | 148 | 0.41 |
| 136 | 8.58 | 33.91 | | 168 | 250 | 7.09 | 34.00 | | 26.64 | 141 | 0.49 |
| 176 | 8.14 | 34.04 | | 152 | 300 | 6.58 | 34.04 | | 26.74 | 131 | 0.56 |
| 218 | 7.48 | 34.00 | | 146 | 400 | 6.08 | 34.14 | | 26.88 | 118 | 0.69 |
| 259 | 6.99 | 34.00 | | 139 | 500 | 5.73 | 34.25 | | 27.02 | 105 | 0.80 |
| 351 | 6.26 | 34.09 | | 124 | | | | | | | |
| 442 | 5.95 | 34.18 | | 113 | | | | | | | |
| 544 | 5.53 | 34.31 | | 98 | | | | | | | |
| SPENCER F. BAIRD; July 11, 1952; 2012 GCT; 32°55.5'N, 121°11'W; sounding, 2000 fm; wind, 320°, force 2; weather, cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | | 85.70 |
| 0 | 16.30 | 33.24 | 6.17 | 359 | 0 | 16.30 | 33.24 | 6.17 | 24.35 | 359 | 0.00 |
| 10 | 15.76 | 33.14 | 5.97 | 354 | 10 | 15.76 | 33.14 | 5.97 | 24.39 | 354 | 0.04 |
| 20 | 15.50 | 33.15 | 6.32 | 348 | 20 | 15.50 | 33.15 | 6.32 | 24.46 | 348 | 0.07 |
| 35 | 14.71 | 33.17 | 6.02 | 330 | 30 | 15.21 | 33.16 | 6.11 | 24.53 | 341 | 0.11 |
| 50 | 13.13 | 33.22 | 6.33 | 296 | 50 | 13.13 | 33.22 | 6.33 | 25.01 | 296 | 0.17 |
| 65 | 12.35 | 33.24 | 5.78 | 280 | 75 | 11.60 | 33.23 | 5.55 | 25.31 | 267 | 0.24 |
| 80 | 11.36 | 33.23 | 5.43 | 263 | 100 | 10.72 | 33.49 | 4.83 | 25.67 | 233 | 0.30 |
| 99 | 10.74 | 33.49 | 4.83 | 233 | 150 | 9.13 | 33.68 | 4.31 | 26.09 | 193 | 0.41 |
| 123 | 10.11 | 33.49 | 4.77 | 223 | 200 | 8.54 | 33.96 | 3.20 | 26.40 | 164 | 0.50 |
| 152 | 9.08 | 33.69 | 4.27 | 192 | 250 | 7.65 | 34.00 | | 26.56 | 148 | 0.58 |
| 199 | 8.54 | 33.96 | 3.22 | 164 | 300 | 6.96 | 34.07 | 2.27 | 26.71 | 134 | 0.65 |
| 247 | 7.71 | 34.00 | - | 149 | 400 | 6.09 | 34.13 | 0.94 | 26.88 | 118 | 0.79 |
| 295 | 7.00 | 34.06 | 2.30 | 135 | 500 | 5.48 | 34.24 | 0.55 | 27.04 | 103 | 0.90 |
| 396 | 6.12 | 34.13 | 0.96 | 119 | 600 | 5.18 | 34.28 | 0.39 | 27.11 | 97 | 1.01 |
| 495 | 5.50 | 34.24 | 0.56 | 103 | | | | | | | |
| 606 | 5.16 | 34.28 | 0.39 | 96 | | | | | | | |
| SPENCER F. BAIRD; July 11, 1952; 1603 GCT; 32°39'N, 121°53'W; sounding, 2160 fm; wind, 320°, force 2; weather, cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | | 85.80 |
| 0 | 15.61 | 33.03 | 5.91 | 359 | 0 | 15.61 | 33.03 | 5.91 | 24.34 | 359 | 0.00 |
| 10 | 15.34 | 33.12 | 5.98 | 347 | 10 | 15.34 | 33.12 | 5.98 | 24.47 | 347 | 0.04 |
| 20 | 14.96 | 33.06 | 6.07 | 344 | 20 | 14.96 | 33.06 | 6.07 | 24.51 | 344 | 0.07 |
| 35 | 13.88 | 33.08 | 6.25 | 320 | 30 | 14.25 | 33.07 | 6.19 | 24.67 | 328 | 0.10 |
| 50 | 12.83 | 33.05 | 6.17 | 303 | 50 | 12.83 | 33.05 | 6.17 | 24.94 | 303 | 0.17 |
| 65 | 11.48 | 33.00 | 5.71 | 282 | 75 | 10.65 | 33.02 | 5.35 | 25.32 | 266 | 0.24 |
| 80 | 10.20 | 33.10 | 5.06 | 253 | 100 | 9.43 | 33.38 | 4.19 | 25.80 | 220 | 0.30 |
| 99 | 9.46 | 33.37 | 4.22 | 221 | 150 | 8.59 | 33.83 | 3.09 | 26.29 | 174 | 0.40 |
| 123 | 8.90 | 33.61 | 3.41 | 195 | 200 | 8.16 | 34.03 | 2.46 | 26.51 | 153 | 0.48 |
| 152 | 8.57 | 33.84 | 3.06 | 173 | 250 | 7.70 | 34.04 | 2.06 | 26.59 | 146 | 0.56 |
| 200 | 8.16 | 34.03 | 2.46 | 153 | 300 | 7.12 | 34.12 | 1.48 | 26.73 | 132 | 0.63 |
| 248 | 7.72 | 34.04 | 2.08 | 146 | 400 | 6.20 | 34.10 | 0.83 | 26.84 | 122 | 0.76 |
| 296 | 7.17 | 34.12 | 1.52 | 133 | 500 | 5.78 | 34.22 | 0.52 | 26.99 | 108 | 0.88 |
| 397 | 6.22 | 34.10 | 0.84 | 122 | 600 | 5.29 | 34.25 | 0.34 | 27.07 | 100 | 0.99 |
| 496 | 5.80 | 34.22 | 0.54 | 108 | | | | | | | |
| 601 | 5.28 | 34.25 | 0.33 | 100 | | | | | | | |

SIO

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 85.90 | SPENCER F. BAIRD; July 11, 1952; 1126 GCT; 32°17'N, 122°37'W; sounding, 2280 fm; wind, 270°, force 2; weather, cloudy; sea, slight; wire angle, 17°. | | | | | | | | | | |
| 0 | 16.56 | 33.03 | 5.80 | 380 | 0 | 16.56 | 33.03 | 5.80 | 24.13 | 380 | 0.00 |
| 9 | 15.03 | 32.97 | 6.03 | 352 | 10 | 15.00 | 32.97 | 6.04 | 24.43 | 351 | 0.04 |
| 19 | 14.84 | 33.03 | 6.17 | 343 | 20 | 14.82 | 33.03 | 6.18 | 24.51 | 343 | 0.07 |
| 33 | - | 32.94 | 6.30 | | 30 | 14.55 | 32.96 | 6.28 | 24.52 | 343 | 0.11 |
| 47 | 12.68 | 33.10 | 6.29 | 296 | 50 | 12.75 | 33.13 | 6.24 | 25.02 | 295 | 0.17 |
| 62 | 11.64 | 33.16 | 5.88 | 273 | 75 | 10.45 | 33.12 | 5.20 | 25.43 | 256 | 0.24 |
| 76 | 10.40 | 33.12 | 5.16 | 255 | 100 | 9.89 | 33.34 | 4.60 | 25.70 | 230 | 0.30 |
| 94 | 10.00 | 33.30 | 4.86 | 235 | 150 | 8.89 | 33.74 | 3.20 | 26.17 | 185 | 0.41 |
| 117 | 9.10 | 33.48 | 4.02 | 208 | 200 | 7.92 | 33.91 | 2.75 | 26.45 | 159 | 0.49 |
| 144 | 8.92 | 33.72 | 3.24 | 187 | 250 | 7.56 | 34.06 | 1.73 | 26.62 | 143 | 0.57 |
| 189 | 8.06 | 33.87 | 2.93 | 164 | 300 | 7.40 | 34.15 | 1.37 | 26.71 | 134 | 0.64 |
| 235 | 7.60 | 34.02 | - | 146 | 400 | 6.32 | 34.25 | 1.02 | 26.94 | 112 | 0.77 |
| 280 | 7.52 | 34.12 | 1.42 | 138 | 500 | 5.68 | 34.27 | 0.58 | 27.04 | 103 | 0.88 |
| 377 | 6.50 | 34.22 | 1.13 | 117 | | | | | | | |
| 472 | 5.84 | 34.28 | 0.67 | 104 | | | | | | | |
| 576 | 5.33 | 34.22 | 0.43 | 103 | | | | | | | |
| 90.28 | SPENCER F. BAIRD; July 9, 1952; 0521 GCT; 33°28'N, 117°47'W; sounding, 280 fm; wind, 320°, force 2; weather, clear; sea, slight; wire angle, 19°. | | | | | | | | | | |
| 0 | 16.65 | 33.47 | 6.70 | 350 | 0 | 16.65 | 33.47 | 6.70 | 24.44 | 350 | 0.00 |
| 9 | 15.80 | 33.45 | 6.86 | 333 | 10 | 15.25 | 33.45 | 6.84 | 24.74 | 321 | 0.03 |
| 24 | 11.32 | 33.45 | 5.52 | 246 | 20 | 12.21 | 33.45 | 5.95 | 25.37 | 262 | 0.06 |
| 48 | 9.80 | 33.60 | 3.59 | 210 | 30 | 10.65 | 33.46 | 4.40 | 25.66 | 234 | 0.09 |
| 71 | 9.55 | 33.79 | 3.33 | 192 | 50 | 9.76 | 33.62 | 3.57 | 25.94 | 208 | 0.13 |
| 95 | 9.36 | 33.91 | 2.82 | 180 | 75 | 9.53 | 33.81 | 3.21 | 26.12 | 190 | 0.18 |
| 118 | 9.18 | 34.01 | 2.62 | 170 | 100 | 9.32 | 33.94 | 2.77 | 26.26 | 177 | 0.23 |
| 147 | 9.13 | 34.00 | 2.33 | 170 | 150 | (9.12) | (34.00) | (2.28) | (26.34) | (170) | (0.32) |
| 90.30 | SPENCER F. BAIRD; July 9, 1952; 0700 GCT; 33°24.5'N, 117°56.5'W; sounding, 200 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 08°. | | | | | | | | | | |
| 0 | 18.15 | 33.49 | 5.93 | 382 | 0 | 18.15 | 33.49 | 5.93 | 24.10 | 382 | 0.00 |
| 10 | 18.16 | 33.48 | 5.96 | 383 | 10 | 18.16 | 33.48 | 5.96 | 24.09 | 383 | 0.04 |
| 25 | 11.87 | 33.48 | 5.87 | 253 | 20 | 13.25 | 33.48 | 5.91 | 25.19 | 279 | 0.07 |
| 50 | 9.72a) | 33.65 | 3.40 | 205 | 30 | 10.50 | 33.49 | 5.15 | 25.71 | 229 | 0.10 |
| 74 | 9.56 | 33.82 | 2.80 | 190 | 50 | 9.72 | 33.65 | 3.40 | 25.97 | 205 | 0.14 |
| 99 | 9.38 | 33.98 | 2.43 | 175 | 75 | 9.55 | 33.82 | 2.78 | 26.13 | 190 | 0.19 |
| | | | | | 100 | (9.36) | (33.99) | (2.41) | (26.29) | (174) | (0.24) |
| 90.37 | SPENCER F. BAIRD; July 9, 1952; 1053 GCT; 33°11'N, 118°23.5'W; sounding, 610 fm; wind, 270°, force 3; weather, clear; sea, moderate; wire angle, 28°. | | | | | | | | | | |
| 0 | 16.66 | 33.37 | 5.96 | 357 | 0 | 16.66 | 33.37 | 5.96 | 24.36 | 357 | 0.00 |
| 9 | 16.67 | 33.38 | 5.89 | 357 | 10 | 16.67 | 33.38 | 5.91 | 24.37 | 357 | 0.04 |
| 22 | 14.02 | 33.30 | 6.50 | 307 | 20 | 15.00 | 33.31 | 6.45 | 24.69 | 326 | 0.07 |
| 44 | 10.59 | 33.42 | 4.67 | 236 | 30 | 12.13 | 33.32 | 5.61 | 25.28 | 270 | 0.10 |
| 65 | 9.77 | 33.58 | 3.72 | 211 | 50 | 10.33 | 33.45 | 4.40 | 25.71 | 229 | 0.15 |
| 87 | 9.33 | 33.81 | 2.99 | 187 | 75 | 9.55 | 33.67 | 3.32 | 26.01 | 201 | 0.20 |
| 131 | 9.12 | 34.04 | 2.24 | 167 | 100 | 9.23 | 33.92 | 2.69 | 26.26 | 177 | 0.25 |
| 171 | 9.00 | 34.12 | 1.92 | 159 | 150 | 9.08 | 34.08 | 2.09 | 26.41 | 163 | 0.34 |
| 211 | 8.66 | 34.19 | 1.55 | 149 | 200 | 8.77 | 34.17 | 1.67 | 26.53 | 152 | 0.42 |
| 252 | 8.37 | 34.24 | 1.16 | 141 | 250 | 8.39 | 34.24 | 1.18 | 26.64 | 141 | 0.49 |
| 337 | 7.78 | 34.31 | 0.76 | 127 | 300 | 8.07 | 34.29 | 0.90 | 26.73 | 133 | 0.56 |
| 420 | 6.90 | 34.28 | 0.53 | 117 | 400 | 7.09 | 34.29 | 0.59 | 26.87 | 119 | 0.70 |
| 509 | 6.35 | 34.33 | 0.33 | 107 | 500 | 6.41 | 34.33 | 0.34 | 26.99 | 107 | 0.82 |
| 596 | 5.72 | 34.32 | 0.33 | 100 | 600 | 5.70 | 34.32 | 0.32 | 27.07 | 100 | 0.93 |
| 694 | 5.20 | 34.43 | 0.31 | 86 | 700 | 5.17 | 34.43 | 0.32 | 27.23 | 85 | 1.03 |
| 890 | 4.43 | 34.42 | 0.38 | 78 | 800 | 4.74 | 34.43 | 0.34 | 27.27 | 81 | 1.12 |
| | | | | | 1000 | (4.10) | (34.42) | | (27.34) | (75) | (1.29) |

a) Mean value of 9.65 and 9.80°C.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| SPENCER F. BAIRD; July 10, 1952; 0004, 0025 GCT; 32°54.5'N, 118°56'W; sounding, 910 fm; wind, 270°, force 4; weather, clear; sea, rough; wire angle, 13°, 15°. | | | | | | | | | | | 90.45 |
| 0 | 16.74 | 33.37 | 5.98 | 359 | 0 | 16.74 | 33.37 | 5.98 | 24.35 | 359 | 0.00 |
| 10 | 16.66 | 33.37 | 6.05 | 357 | 10 | 16.66 | 33.37 | 6.05 | 24.36 | 357 | 0.04 |
| 20 | 16.31 | 33.38 | 5.99 | 349 | 20 | 16.31 | 33.38 | 5.99 | 24.45 | 349 | 0.07 |
| 35 | 12.16 | 33.40 | 5.64 | 265 | 30 | 13.08 | 33.39 | 5.81 | 25.15 | 282 | 0.10 |
| 49 | 10.44 | 33.53 | 4.67 | 225 | 50 | 10.39 | 33.54 | 4.65 | 25.77 | 224 | 0.15 |
| | | | | | 75 | 9.45 | 33.75 | 3.25 | 26.09 | 193 | 0.21 |
| 64 | 9.63 | 33.62 | 3.84 | 206 | 100 | 9.16 | 33.93 | 3.10 | 26.28 | 175 | 0.25 |
| 78 | 9.40 | 33.78 | 3.22 | 190 | 150 | 8.28 | 34.00 | 2.50 | 26.47 | 157 | 0.34 |
| 97 | 9.20 | 33.91 | 3.13 | 177 | 200 | 8.01 | 34.12 | 1.72 | 26.60 | 144 | 0.41 |
| 120 | 8.83 | 34.00 | 2.96 | 165 | 250 | 7.71 | 34.17 | 1.33 | 26.69 | 136 | 0.49 |
| 147 | 8.30 | 34.00 | 2.54 | 157 | 300 | 7.42 | 34.25 | 1.14 | 26.79 | 127 | 0.55 |
| 193 | 8.05 | 34.11 | 1.80 | 146 | 400 | 6.73 | 34.27 | 0.72 | 26.90 | 116 | 0.68 |
| 240 | 7.78 | 34.16 | 1.38 | 138 | 500 | 6.11 | 34.29 | 0.33 | 27.00 | 107 | 0.80 |
| 286 | 7.50 | 34.24 | 1.19 | 128 | 600 | (5.57) | (34.35) | | (27.11) | (96) | (0.91) |
| 383 | 6.84 | 34.27 | 0.82 | 117 | | | | | | | |
| 481 | 6.22 | 34.28 | 0.35 | 109 | | | | | | | |
| 585 | 5.64 | 34.34 | 0.29 | 97 | | | | | | | |
| SPENCER F. BAIRD; July 10, 1952; 0441 GCT; 32°40'N, 119°31'W; sounding, 600 fm; wind, 270°, force 4; weather, partly cloudy; sea, moderate; wire angle, 44°. | | | | | | | | | | | 90.53 |
| 0 | 14.49 | 33.26 | 6.04 | 319 | 0 | 14.49 | 33.26 | 6.04 | 24.76 | 319 | 0.00 |
| 7 | 14.50 | 33.27 | 6.21 | 319 | 10 | 14.49 | 33.28 | 6.27 | 24.78 | 318 | 0.03 |
| 19 | 14.45 | 33.31 | 6.39 | 315 | 20 | 14.44 | 33.31 | 6.38 | 24.81 | 315 | 0.06 |
| 36 | 12.79 | 33.30 | 6.12 | 283 | 30 | 13.73 | 33.30 | 6.23 | 24.95 | 301 | 0.09 |
| 54 | 11.78 | 33.39 | 5.66 | 258 | 50 | 12.03 | 33.37 | 5.78 | 25.34 | 264 | 0.15 |
| 70 | 10.56 | 33.42 | 4.91 | 235 | 75 | 10.20 | 33.44 | 4.65 | 25.72 | 228 | 0.21 |
| 102 | 8.90 | 33.60 | 3.84 | 196 | 100 | 8.94 | 33.58 | 3.88 | 26.04 | 198 | 0.27 |
| 125 | 8.64 | 33.82 | 3.65 | 176 | 150 | 8.11 | 33.93 | 3.21 | 26.44 | 160 | 0.36 |
| 151 | 8.11 | 33.93 | 3.20 | 160 | 200 | 7.97 | 34.06 | 2.09 | 26.56 | 148 | 0.44 |
| 175 | 8.08 | 34.00 | 2.66 | 154 | 250 | 7.16 | 34.12 | 1.34 | 26.73 | 133 | 0.51 |
| 231 | 7.54 | 34.11 | 1.45 | 139 | 300 | 6.80 | 34.14 | 1.11 | 26.79 | 127 | 0.57 |
| 286 | 6.80 | 34.13 | 1.22 | 127 | 400 | 6.53 | 34.23 | | 26.90 | 116 | 0.70 |
| 348 | 6.80 | 34.21 | 0.82 | 121 | 500 | 6.09 | 34.27 | 0.48 | 26.99 | 108 | 0.82 |
| 417 | 6.44 | 34.23 | - | 115 | | | | | | | |
| 500 | 6.09 | 34.27 | 0.48 | 108 | | | | | | | |
| SPENCER F. BAIRD; July 10, 1952; 0825 GCT; 32°25'N, 119°57.5'W; sounding, 518 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 23°. | | | | | | | | | | | 90.60 |
| 0 | 16.23 | 33.17 | 5.73 | 362 | 0 | 16.23 | 33.17 | 5.73 | 24.31 | 362 | 0.00 |
| 9 | 16.24 | 33.12 | 5.79 | 366 | 10 | 16.24 | 33.12 | 5.81 | 24.27 | 366 | 0.04 |
| 18 | 16.10 | 33.12 | 6.17 | 363 | 20 | 16.04 | 33.12 | 6.16 | 24.31 | 362 | 0.07 |
| 32 | - | 33.10 | 5.95 | | 30 | 15.35 | 33.11 | 5.97 | 24.46 | 348 | 0.11 |
| 50 | 13.29 | 33.04 | 6.42 | 312 | 50 | 13.29 | 33.04 | 6.42 | 24.84 | 312 | 0.17 |
| 64 | 12.74 | 32.99 | 6.01 | 305 | 75 | 11.75 | 33.02 | 5.83 | 25.12 | 285 | 0.25 |
| 77 | 11.58 | 33.02 | 5.81 | 282 | 100 | 10.01 | 33.03 | 5.34 | 25.43 | 255 | 0.32 |
| 99 | 10.06 | 33.03 | 5.38 | 256 | 150 | 8.68 | 33.75 | 3.45 | 26.21 | 182 | 0.43 |
| 118 | 9.47 | 33.28 | 4.78 | 228 | 200 | 8.30 | 33.92 | 3.06 | 26.40 | 163 | 0.52 |
| 141 | 8.76 | 33.62 | 3.69 | 192 | 250 | 7.61 | 33.95 | 2.82 | 26.53 | 151 | 0.60 |
| 185 | 8.44 | 33.91 | 3.06 | 166 | 300 | 7.10 | 33.99 | 1.93 | 26.63 | 142 | 0.67 |
| 233 | 7.84 | 33.94 | 3.07 | 155 | 400 | 6.54 | 34.15 | 0.90 | 26.83 | 123 | 0.81 |
| 274 | 7.31 | 33.96 | 2.36 | 147 | 500 | 6.02 | 34.26 | 0.49 | 26.99 | 108 | 0.93 |
| 372 | 6.68 | 34.11 | 1.06 | 127 | | | | | | | |
| 469 | 6.20 | 34.23 | 0.59 | 112 | | | | | | | |
| 575 | 5.56 | 34.31 | 0.29 | 99 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

90.70 SPENCER F. BAIRD; July 10, 1952; 1343, 1428 GCT; 32°00.5'N, 120°43'W; sounding, 1980 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 16°, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.16 | 33.14 | 5.72 | 363 | 0 | 16.16 | 33.14 | 5.72 | 24.30 | 363 | 0.00 |
| 10 | 16.16 | 33.15 | 5.75 | 362 | 10 | 16.16 | 33.15 | 5.75 | 24.31 | 362 | 0.04 |
| 24 | 15.68 | 33.06 | 6.21 | 359 | 20 | 16.15 | 33.07 | 6.04 | 24.25 | 368 | 0.07 |
| 53 | 13.29 | 33.11 | 5.88 | 307 | 30 | 15.13 | 33.06 | 6.17 | 24.47 | 347 | 0.11 |
| 77 | 11.89 | 33.15 | 5.86 | 278 | 50 | 13.49 | 33.10 | 5.91 | 24.85 | 311 | 0.17 |
| 107 | 10.26 | 33.33 | 4.58 | 237 | 75 | 12.00 | 33.15 | 5.86 | 25.17 | 280 | 0.25 |
| 159 | 8.74 | - | 3.86 | | 100 | 10.59 | 33.28 | 4.70 | 25.53 | 246 | 0.32 |
| 212 | 8.44 | 33.92 | 2.66 | 165 | 150 | 8.86 | 33.65 | 4.02 | 26.10 | 192 | 0.43 |
| 271 | 7.62 | 34.02 | 2.22 | 146 | 200 | 8.53 | 33.90 | 2.85 | 26.35 | 168 | 0.52 |
| 319 | 7.11 | 34.13 | 1.71 | 131 | 250 | 7.89 | 33.98 | 2.38 | 26.51 | 153 | 0.60 |
| | | | | | 300 | 7.32 | 34.10 | 1.92 | 26.69 | 136 | 0.67 |
| 425 | 5.86 | 34.14 | 0.95 | 115 | 400 | 6.06 | 34.14 | 1.11 | 26.89 | 117 | 0.81 |
| 531 | 5.38 | 34.20 | 0.57 | 105 | 500 | 5.51 | 34.17 | 0.65 | 26.98 | 109 | 0.92 |
| 637 | 4.98 | 34.31 | 0.39 | 92 | 600 | 5.10 | 34.27 | 0.44 | 27.11 | 97 | 1.03 |
| 843 | 4.34 | 34.41 | 0.44 | 78 | 700 | 4.78 | 34.35 | 0.40 | 27.21 | 87 | 1.13 |
| 1052 | 3.72 | 34.49 | 0.68 | 66 | 800 | 4.48 | 34.39 | 0.42 | 27.27 | 81 | 1.22 |
| 1257 | 3.29 | 34.55 | 0.97 | 57 | 1000 | 3.86 | 34.47 | 0.60 | 27.40 | 69 | 1.39 |

90.80 SPENCER F. BAIRD; July 10, 1952; 1843 GCT; 31°47'N, 121°19'W; sounding, 2000 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.43 | 33.21 | 5.72 | 364 | 0 | 16.43 | 33.21 | 5.72 | 24.29 | 364 | 0.00 |
| 10 | 16.41 | 33.21 | 5.68 | 363 | 10 | 16.41 | 33.21 | 5.68 | 24.30 | 363 | 0.04 |
| 19 | 15.96 | 33.11 | 5.83 | 361 | 20 | 15.87 | 33.11 | 5.84 | 24.35 | 359 | 0.07 |
| 33 | 15.00 | 33.09 | 5.98 | 342 | 30 | 15.19 | 33.09 | 5.95 | 24.48 | 346 | 0.11 |
| 47 | 14.05 | 33.15 | 6.00 | 319 | 50 | 13.76 | 33.15 | 6.01 | 24.83 | 313 | 0.17 |
| 62 | 12.42 | 33.13 | 6.01 | 289 | 75 | 11.10 | 33.20 | 5.10 | 25.38 | 261 | 0.25 |
| 76 | 11.00 | 33.20 | 5.02 | 259 | 100 | 9.71 | 33.35 | 4.29 | 25.73 | 227 | 0.31 |
| 94 | 9.93 | 33.31 | 4.48 | 233 | 150 | 8.90 | 33.72 | 3.29 | 26.15 | 187 | 0.41 |
| 117 | 9.28 | 33.45 | 3.83 | 213 | 200 | 8.14 | 33.93 | 2.72 | 26.43 | 160 | 0.50 |
| 144 | 8.96 | 33.69 | 3.35 | 190 | 250 | 7.61 | 34.03 | 2.14 | 26.59 | 146 | 0.58 |
| 189 | 8.28 | 33.89 | 2.90 | 165 | 300 | 7.12 | 34.05 | 1.74 | 26.68 | 137 | 0.65 |
| 234 | 7.76 | 34.01 | 2.25 | 149 | 400 | 6.24 | 34.10 | 0.98 | 26.83 | 123 | 0.79 |
| 279 | 7.32 | 34.04 | 1.93 | 141 | 500 | 5.64 | 34.18 | 0.59 | 26.97 | 109 | 0.91 |
| 376 | 6.40 | 34.08 | 1.15 | 126 | | | | | | | |
| 471 | 5.80 | 34.16 | 0.68 | 113 | | | | | | | |
| 574 | 5.22 | 34.24 | 0.43 | 100 | | | | | | | |

90.90 SPENCER F. BAIRD; July 10, 1952; 2330 GCT; 31°25.5'N, 121°59.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.59 | 33.10 | 5.72 | 398 | 0 | 17.59 | 33.10 | 5.72 | 23.94 | 398 | 0.00 |
| 10 | 15.95 | 33.10 | 5.76 | 361 | 10 | 15.95 | 33.10 | 5.76 | 24.32 | 361 | 0.04 |
| 25 | 15.72 | 33.08 | 5.76 | 358 | 20 | 15.78 | 33.09 | 5.76 | 24.35 | 359 | 0.07 |
| 49 | 14.42 | 33.08 | 6.10 | 331 | 30 | 15.64 | 33.08 | 5.85 | 24.37 | 356 | 0.11 |
| 73 | 12.80 | 33.03 | 6.41 | 303 | 50 | 14.33 | 33.08 | 6.12 | 24.66 | 329 | 0.18 |
| 97 | 12.00 | 33.12 | 5.60 | 282 | 75 | 12.75 | 33.03 | 6.40 | 24.94 | 303 | 0.26 |
| 148 | 9.49 | 33.48 | 3.68 | 214 | 100 | 11.93 | 33.15 | 5.39 | 25.19 | 279 | 0.33 |
| 193 | 8.76 | 33.80 | 2.92 | 179 | 150 | 9.45 | 33.49 | 3.65 | 25.89 | 212 | 0.46 |
| 240 | 8.26 | 33.99 | 2.35 | 158 | 200 | 8.69 | 33.85 | 2.83 | 26.29 | 174 | 0.55 |
| 285 | 7.41 | 34.00 | 2.23 | 145 | 250 | 8.09 | 33.99 | 2.33 | 26.49 | 155 | 0.64 |
| 381 | 6.53 | 34.14 | 1.08 | 123 | 300 | 7.27 | 34.01 | 2.10 | 26.62 | 142 | 0.71 |
| 474 | 5.81 | 34.16 | 0.61 | 113 | 400 | 6.37 | 34.15 | 0.95 | 26.86 | 120 | 0.85 |
| 569 | 5.33 | 34.25 | 0.39 | 101 | 500 | 5.66 | 34.18 | 0.54 | 26.97 | 110 | 0.97 |
| 760 | 4.56 | 34.38 | 0.34 | 82 | 600 | 5.20 | 34.28 | 0.37 | 27.10 | 97 | 1.08 |
| 948 | 3.94 | 34.44 | 0.58 | 72 | 700 | 4.79 | 34.35 | 0.35 | 27.21 | 87 | 1.18 |
| 1150 | 3.48 | 34.51 | 0.76 | 62 | 800 | 4.42 | 34.39 | 0.39 | 27.28 | 80 | 1.27 |
| | | | | | 1000 | 3.80 | 34.46 | 0.64 | 27.40 | 69 | 1.44 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

SPENCER F. BAIRD; July 11, 1952; 0413 GCT; 31°07'N, 122°39'W; sounding, 2080 fm; wind, 270°, force 2; weather, clear; sea, slight; wire angle, 06°. 90.100

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.06 | 33.29 | 5.52 | 395 | 0 | 18.06 | 33.29 | 5.52 | 23.97 | 395 | 0.00 |
| 10 | 17.44 | 33.42 | 5.84 | 371 | 10 | 17.44 | 33.42 | 5.84 | 24.22 | 371 | 0.04 |
| 20 | 17.21 | 33.48 | 5.66 | 361 | 20 | 17.21 | 33.48 | 5.66 | 24.32 | 361 | 0.07 |
| 35 | 16.95 | 33.40 | 5.67 | 361 | 30 | 17.03 | 33.43 | 5.65 | 24.32 | 361 | 0.11 |
| 50 | 16.22 | 33.48 | 5.78 | 340 | 50 | 16.22 | 33.48 | 5.78 | 24.55 | 340 | 0.18 |
| 65 | 15.68 | 33.58 | 5.80 | 321 | 75 | 15.52 | 33.58 | 5.85 | 24.78 | 317 | 0.26 |
| 80 | 15.44 | 33.58 | 5.86 | 316 | 100 | 14.25 | 33.50 | 5.63 | 25.00 | 297 | 0.34 |
| 99 | 14.30 | 33.50 | 5.64 | 298 | 150 | 9.90 | 33.28 | 4.79 | 25.65 | 235 | 0.48 |
| 123 | 11.98 | 33.31 | 5.54 | 268 | 200 | 8.79 | 33.77 | 4.04 | 26.21 | 182 | 0.58 |
| 151 | 9.88 | 33.28 | 4.78 | 235 | 250 | 8.01 | 33.95 | 3.32 | 26.47 | 157 | 0.67 |
| 199 | 8.80 | 33.77 | 4.06 | 182 | 300 | 7.40 | 34.00 | 2.59 | 26.60 | 145 | 0.75 |
| 246 | 8.06 | 33.94 | 3.38 | 158 | 400 | 6.29 | 34.07 | 1.66 | 26.80 | 125 | 0.89 |
| 294 | 7.48 | 34.00 | 2.62 | 146 | 500 | 5.83 | 34.22 | 0.62 | 26.98 | 109 | 1.01 |
| 395 | 6.32 | 34.06 | 1.73 | 126 | 600 | (5.40) | (34.27) | (0.45) | (27.07) | (100) | (1.12) |
| 493 | 5.86 | 34.21 | 0.64 | 110 | | | | | | | |
| 597 | 5.42 | 34.27 | 0.47 | 100 | | | | | | | |

SPENCER F. BAIRD; July 9, 1952; 0055 GCT; 32°55.5'N, 117°19.5'W; sounding, 65 fm; wind, 300°, force 2; weather, partly cloudy; sea, slight; wire angle, 09°. 93.27

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.02 | 33.48 | 7.13 | 335 | 0 | 16.02 | 33.48 | 7.13 | 24.60 | 335 | 0.00 |
| 10 | 10.14 | 33.58 | 4.00 | 217 | 10 | 10.14 | 33.58 | 4.00 | 25.84 | 217 | 0.03 |
| 20 | 9.88 | 33.63 | 3.68 | 209 | 20 | 9.88 | 33.63 | 3.68 | 25.92 | 209 | 0.05 |
| 30 | 9.70 | 33.69 | 3.24 | 202 | 30 | 9.70 | 33.69 | 3.24 | 26.00 | 202 | 0.07 |
| 50 | 9.48 | 33.81 | 2.77 | 189 | 50 | 9.48 | 33.81 | 2.77 | 26.13 | 189 | 0.11 |
| 74 | 9.40 | 33.93 | 2.58 | 179 | 75 | (9.40) | (33.93) | (2.58) | (26.24) | (179) | (0.16) |

SPENCER F. BAIRD; July 8, 1952; 2245 GCT; 32°48'N, 117°31'W; sounding, 360 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 22°. 93.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.20 | 33.35 | 5.82 | 394 | 0 | 18.20 | 33.35 | 5.82 | 23.98 | 394 | 0.00 |
| 9 | 16.62 | 33.32 | 6.15 | 360 | 10 | 16.50 | 33.32 | 6.20 | 24.36 | 357 | 0.04 |
| 18 | 13.71 | 33.30 | 6.56 | 301 | 20 | 13.40 | 33.30 | 6.52 | 25.02 | 295 | 0.07 |
| 32 | 11.44 | 33.36 | 5.60 | 255 | 30 | 11.76 | 33.35 | 5.82 | 25.37 | 261 | 0.10 |
| 46 | 10.60 | 33.42 | 4.81 | 236 | 50 | 10.38 | 33.44 | 4.54 | 25.69 | 231 | 0.15 |
| 60 | 10.00 | 33.57 | 3.90 | 215 | 75 | 9.71 | 33.75 | 3.18 | 26.05 | 197 | 0.20 |
| 74 | 9.72 | 33.75 | 3.19 | 197 | 100 | 9.49 | 33.88 | 2.73 | 26.18 | 184 | 0.25 |
| 92 | 9.52 | 33.84 | 2.86 | 188 | 150 | 9.08 | 34.04 | 2.38 | 26.37 | 166 | 0.34 |
| 114 | 9.44 | 33.93 | 2.62 | 180 | 200 | 8.90 | 34.17 | 1.87 | 26.50 | 154 | 0.42 |
| 140 | 9.12 | 34.01 | 2.48 | 169 | 250 | 8.50 | 34.22 | 1.43 | 26.61 | 144 | 0.50 |
| 183 | 8.99 | 34.13 | 2.04 | 158 | 300 | 8.20 | 34.24 | 1.08 | 26.67 | 138 | 0.57 |
| 227 | 8.70 | 34.21 | 1.63 | 148 | 400 | 7.62 | 34.31 | 0.68 | 26.81 | 125 | 0.71 |
| 271 | 8.35 | 34.22 | 1.27 | 142 | 500 | 6.91 | 34.33 | 0.47 | 26.92 | 114 | 0.83 |
| 364 | 7.84 | 34.30 | 0.78 | 129 | | | | | | | |
| 458 | 7.28 | 34.33 | 0.55 | 119 | | | | | | | |
| 564 | 6.12 | 34.34 | 0.39 | 103 | | | | | | | |

SPENCER F. BAIRD; July 8, 1952; 1700 GCT; 32°30'N, 118°13'W; sounding, 880 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 05°. 93.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.45 | 33.43 | 5.85 | 371 | 0 | 17.45 | 33.43 | 5.85 | 24.22 | 371 | 0.00 |
| 10 | 14.77 | 33.35 | 6.41 | 318 | 10 | 14.77 | 33.35 | 6.41 | 24.77 | 318 | 0.03 |
| 20 | 13.55 | 33.30 | 6.14 | 298 | 20 | 13.55 | 33.30 | 6.14 | 24.99 | 298 | 0.07 |
| 35 | 13.22 | 33.44 | 5.99 | 281 | 30 | 13.36 | 33.42 | 6.04 | 25.12 | 285 | 0.09 |
| 50 | 12.31 | 33.43 | 5.43 | 265 | 50 | 12.31 | 33.43 | 5.43 | 25.33 | 265 | 0.15 |
| 65 | 10.95 | 33.39 | 4.89 | 244 | 75 | 9.74 | 33.43 | 4.06 | 25.79 | 221 | 0.21 |
| 80 | 9.54 | 33.49 | 3.92 | 214 | 100 | 9.15 | 33.68 | 3.50 | 26.08 | 194 | 0.26 |
| 99 | 9.17 | 33.68 | 3.53 | 194 | 150 | 8.87 | 33.96 | 3.06 | 26.35 | 169 | 0.36 |
| 123 | 8.95 | 33.82 | 3.20 | 180 | 200 | 8.61 | 34.14 | 1.93 | 26.53 | 152 | 0.44 |
| 153 | 8.79 | 33.97 | 3.02 | 167 | 250 | 8.27 | 34.22 | 1.60 | 26.64 | 141 | 0.51 |
| 201 | 8.60 | 34.14 | 1.92 | 151 | 300 | 7.89 | 34.27 | 0.90 | 26.74 | 132 | 0.58 |
| 249 | 8.28 | 34.22 | 1.62 | 141 | 400 | 7.06 | 34.27 | 0.63 | 26.86 | 120 | 0.71 |
| 295 | 7.93 | 34.27 | 0.92 | 132 | 500 | 6.28 | 34.33 | 0.39 | 27.01 | 106 | 0.83 |
| 397 | 7.08 | 34.27 | 0.65 | 121 | 600 | 5.67 | 34.36 | 0.30 | 27.11 | 96 | 0.94 |
| 496 | 6.30 | 34.33 | 0.40 | 106 | | | | | | | |
| 601 | 5.66 | 34.36 | 0.30 | 96 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

93.50 SPENCER F. BAIRD; July 8, 1952; 1121 GCT; 32°10'N, 118°53'W; sounding, 660 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.66 | 33.48 | 6.24 | 328 | 0 | 15.66 | 33.48 | 6.24 | 24.68 | 328 | 0.00 |
| 10 | 15.66 | 33.48 | 6.04 | 328 | 10 | 15.66 | 33.48 | 6.04 | 24.68 | 328 | 0.03 |
| 20 | 15.62 | 33.48 | 6.05 | 327 | 20 | 15.62 | 33.48 | 6.05 | 24.68 | 327 | 0.07 |
| 35 | 13.56 | 33.47 | 5.61 | 286 | 30 | 15.57 | 33.47 | 5.81 | 24.69 | 326 | 0.10 |
| 50 | 11.09 | 33.52 | 4.77 | 237 | 50 | 11.09 | 33.52 | 4.77 | 25.63 | 237 | 0.15 |
| 65 | 9.78 | 33.54 | 3.88 | 214 | 75 | 9.55 | 33.69 | 3.31 | 26.03 | 199 | 0.21 |
| 80 | 9.36 | 33.71 | 3.24 | 195 | 100 | 8.76 | 33.76 | 3.32 | 26.21 | 182 | 0.26 |
| 99 | 8.77 | 33.76 | 3.32 | 182 | 150 | 8.39 | 34.04 | 2.12 | 26.48 | 156 | 0.34 |
| 123 | 8.64 | 33.91 | 2.61 | 169 | 200 | 7.91 | 34.13 | 1.54 | 26.63 | 142 | 0.42 |
| 152 | 8.36 | 34.05 | 2.09 | 155 | 250 | 7.57 | 34.16 | 1.07 | 26.70 | 135 | 0.49 |
| 199 | 7.92 | 34.13 | 1.57 | 142 | 300 | 7.13 | 34.21 | 0.96 | 26.80 | 126 | 0.56 |
| 247 | 7.60 | 34.16 | 1.09 | 136 | 400 | 6.48 | 34.28 | 0.54 | 26.94 | 112 | 0.68 |
| 294 | 7.18 | 34.20 | 0.98 | 127 | 500 | 5.91 | 34.33 | 0.40 | 27.06 | 101 | 0.79 |
| 397 | 6.50 | 34.28 | 0.56 | 112 | 600 | 5.31 | 34.34 | 0.34 | 27.14 | 94 | 0.90 |
| 495 | 5.94 | 34.33 | 0.41 | 102 | | | | | | | |
| 600 | 5.31 | 34.34 | 0.34 | 94 | | | | | | | |

93.60 SPENCER F. BAIRD; July 8, 1952; 0530 GCT; 31°50'N, 119°34'W; sounding, 1960 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 32°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.86 | 33.26 | 6.26 | 327 | 0 | 14.86 | 33.26 | 6.26 | 24.68 | 327 | 0.00 |
| 8 | 14.87 | 33.30 | 6.33 | 324 | 10 | 14.86 | 33.30 | 6.35 | 24.71 | 324 | 0.03 |
| 17 | 14.59 | 33.25 | 6.41 | 322 | 20 | 14.33 | 33.26 | 6.45 | 24.80 | 316 | 0.06 |
| 30 | 13.63 | 33.33 | 6.62 | 297 | 30 | 13.63 | 33.33 | 6.62 | 24.99 | 297 | 0.10 |
| 43 | 12.91 | 33.31 | 6.09 | 285 | 50 | 12.82 | 33.31 | 6.16 | 25.14 | 283 | 0.15 |
| 55 | 12.71 | 33.31 | 6.21 | 281 | 75 | 11.35 | 33.32 | 5.44 | 25.43 | 256 | 0.22 |
| 67 | 12.08 | 33.29 | 5.81 | 271 | 100 | 10.09 | 33.77 | 3.93 | 26.00 | 202 | 0.28 |
| 83 | 10.86 | 33.57 | 5.04 | 229 | 150 | 8.44 | 34.06 | 2.55 | 26.49 | 155 | 0.37 |
| 100 | 10.09 | 33.77 | 3.93 | 202 | 200 | 7.96 | 34.18 | 1.84 | 26.66 | 139 | 0.44 |
| 120 | 9.33 | 33.99 | 3.16 | 174 | 250 | 7.64 | 34.23 | 1.48 | 26.74 | 131 | 0.51 |
| 151 | 8.43 | 34.06 | 2.53 | 155 | 300 | 7.25 | 34.22 | 1.18 | 26.79 | 126 | 0.58 |
| 184 | 8.05 | 34.14 | 2.13 | 143 | 400 | 6.68 | (34.31) | 0.78 | (26.94) | (112) | (0.71) |
| 218 | 7.87 | 34.22 | 1.63 | 135 | 500 | (6.11) | | | | | |
| 296 | 7.28 | 34.22 | 1.19 | 127 | | | | | | | |
| 378 | 6.81 | 34.29 | 0.83 | 115 | | | | | | | |
| 470 | 6.28 | - | 0.68 | | | | | | | | |

93.70 SPENCER F. BAIRD; July 8, 1952; 0045 GCT; 31°29'N, 120°14.5'W; sounding, 2050 fm; wind, 310°, force 2; weather, cloudy; sea, moderate; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.87 | 33.19 | 6.05 | 375 | 0 | 16.87 | 33.19 | 6.05 | 24.18 | 375 | 0.00 |
| 10 | 16.30 | 33.19 | 6.28 | 362 | 10 | 16.30 | 33.19 | 6.28 | 24.31 | 362 | 0.04 |
| 19 | 16.25 | 33.19 | 5.84 | 361 | 20 | 16.25 | 33.19 | 5.82 | 24.32 | 361 | 0.07 |
| 33 | 16.21 | 33.24 | 5.75 | 357 | 30 | 16.22 | 33.24 | 5.77 | 24.37 | 357 | 0.11 |
| 46 | 15.04 | 33.22 | 5.80 | 334 | 50 | 15.06 | 33.23 | 5.80 | 24.62 | 333 | 0.18 |
| 61 | 15.32 | 33.52 | 5.76 | 317 | 75 | 15.60 | 33.68 | 5.98 | 24.84 | 312 | 0.26 |
| 73 | 15.60 | 33.68 | 5.99 | 312 | 100 | 13.30 | 33.34 | 5.60 | 25.07 | 290 | 0.34 |
| 91 | 14.82 | 33.57 | 5.67 | 303 | 150 | 9.34 | 33.28 | 4.35 | 25.74 | 226 | 0.47 |
| 112 | 11.15 | 33.10 | 5.48 | 269 | 200 | 8.50 | 33.84 | 3.59 | 26.31 | 172 | 0.57 |
| 137 | 9.73 | 33.15 | 4.89 | 242 | 250 | 7.88 | 33.97 | 3.11 | 26.50 | 154 | 0.65 |
| 177 | 8.81 | 33.67 | 3.77 | 189 | 300 | 7.20 | 34.01 | 2.44 | 26.63 | 141 | 0.73 |
| 219 | 8.26 | 33.91 | 3.45 | 164 | 400 | 6.54 | 34.14 | 1.12 | 26.83 | 123 | 0.86 |
| 260 | 7.74 | 33.98 | 2.99 | 151 | 500 | 6.06 | 34.24 | 0.67 | 26.97 | 110 | 0.99 |
| 352 | 6.70 | 34.05 | 1.77 | 132 | | | | | | | |
| 444 | 6.37 | 34.21 | 0.74 | 116 | | | | | | | |
| 546 | 5.74 | 34.25 | 0.63 | 105 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| SPENCER F. BAIRD; July 7, 1952; 1952 GCT; 31°10'N, 120°54'W; sounding, 2100 fm; wind, 320°, force 2; weather, cloudy; sea, rough; wire angle, 04°. | | | | | | | | | | | 93.80 |
| 0 | 16.55 | 33.22 | 5.74 | 366 | 0 | 16.55 | 33.22 | 5.74 | 24.27 | 366 | 0.00 |
| 10 | 16.34 | 33.23 | 5.68 | 360 | 10 | 16.34 | 33.23 | 5.68 | 24.33 | 360 | 0.04 |
| 20 | 16.28 | 33.21 | 5.68 | 361 | 20 | 16.28 | 33.21 | 5.68 | 24.33 | 361 | 0.07 |
| 35 | 15.76 | 33.17 | 5.75 | 352 | 30 | 16.10 | 33.19 | 5.72 | 24.35 | 358 | 0.11 |
| 50 | 14.68 | 33.14 | 5.97 | 332 | 50 | 14.68 | 33.14 | 5.97 | 24.63 | 332 | 0.18 |
| 65 | 14.09 | 33.13 | 5.92 | 321 | 75 | 13.90 | 33.15 | 6.25 | 24.80 | 316 | 0.26 |
| 80 | 13.72 | 33.16 | 6.30 | 311 | 100 | 12.65 | 33.16 | 5.90 | 25.06 | 291 | 0.34 |
| 99 | 12.70 | 33.16 | 5.92 | 292 | 150 | 9.59 | 33.38 | 4.61 | 25.78 | 223 | 0.47 |
| 123 | 11.33 | 33.28 | 5.35 | 259 | 200 | 8.65 | 33.86 | 3.74 | 26.30 | 173 | 0.57 |
| 152 | 9.48 | 33.39 | 4.55 | 220 | 250 | 8.00 | 33.86 | 3.02 | 26.40 | 164 | 0.65 |
| 199 | 8.66 | 33.86 | 3.74 | 173 | 300 | 7.25 | 34.04 | 2.33 | 26.65 | 140 | 0.73 |
| 247 | 8.03 | 33.86 | 3.07 | 164 | 400 | 6.42 | 34.13 | 1.09 | 26.83 | 123 | 0.87 |
| 294 | 7.31 | 34.03 | 2.42 | 141 | 500 | 5.96 | 34.26 | 0.61 | 26.99 | 107 | 0.99 |
| 395 | 6.44 | 34.13 | 1.12 | 123 | 600 | (5.48) | (34.30) | (0.41) | (27.09) | (99) | (1.10) |
| 492 | 5.99 | 34.25 | 0.64 | 108 | | | | | | | |
| 597 | 5.50 | 34.30 | 0.42 | 99 | | | | | | | |
| SPENCER F. BAIRD; July 7, 1952; 1520 GCT; 30°50'N, 121°36'W; sounding, 2200 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | | 93.90 |
| 0 | 17.03 | 33.42 | 5.54 | 362 | 0 | 17.03 | 33.42 | 5.54 | 24.32 | 362 | 0.00 |
| 10 | 17.02 | 33.42 | 5.59 | 362 | 10 | 17.02 | 33.42 | 5.59 | 24.32 | 362 | 0.04 |
| 20 | 17.03 | 33.39 | 5.47 | 364 | 20 | 17.03 | 33.39 | 5.47 | 24.29 | 364 | 0.07 |
| 35 | 17.12 | 33.38 | 5.44 | 367 | 30 | 17.10 | 33.38 | 5.45 | 24.27 | 366 | 0.11 |
| 54 | 16.87 | 33.53 | 5.64 | 350 | 50 | 17.04 | 33.52 | 5.58 | 24.39 | 355 | 0.18 |
| 69 | 15.96 | 33.51 | 5.83 | 332 | 75 | 15.92 | 33.48 | 5.81 | 24.62 | 333 | 0.27 |
| 84 | 15.79 | 33.44 | 5.76 | 333 | 100 | 15.15 | 33.41 | 5.84 | 24.73 | 322 | 0.35 |
| 108 | 14.54 | 33.39 | 5.83 | 311 | 150 | 10.60 | 33.30 | 5.02 | 25.54 | 245 | 0.49 |
| 132 | 11.80 | 33.25 | 5.41 | 269 | 200 | 9.02 | 33.70 | 3.69 | 26.12 | 190 | 0.60 |
| 159 | 10.19 | 33.36 | 4.83 | 234 | 250 | 8.46 | 33.99 | 2.83 | 26.43 | 160 | 0.69 |
| 211 | 8.81 | 33.79 | 3.43 | 180 | 300 | 7.80 | 34.09 | 2.14 | 26.61 | 144 | 0.77 |
| 267 | 8.26 | 34.04 | 2.59 | 154 | 400 | 6.55 | 34.14 | 1.17 | 26.82 | 123 | 0.91 |
| 316 | 7.58 | 34.10 | 1.94 | 140 | 500 | 5.93 | 34.23 | 0.71 | 26.97 | 109 | 1.03 |
| 425 | 6.34 | 34.16 | 1.01 | 119 | 600 | 5.45 | 34.29 | 0.43 | 27.08 | 99 | 1.14 |
| 533 | 5.76 | 34.25 | 0.60 | 106 | | | | | | | |
| 642 | 5.28 | 34.31 | 0.34 | 96 | | | | | | | |
| SPENCER F. BAIRD; July 6, 1952; 0307 GCT; 32°15.5'N, 117°09'W; sounding, 28 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | | 97.30 |
| 0 | 15.58 | 33.51 | 6.47 | 324 | 0 | 15.58 | 33.51 | 6.47 | 24.72 | 324 | 0.00 |
| 10 | 13.14 | 33.41 | 6.36 | 282 | 10 | 13.14 | 33.41 | 6.36 | 25.15 | 282 | 0.03 |
| 20 | 10.83 | 33.42 | 5.06 | 240 | 20 | 10.83 | 33.42 | 5.06 | 25.60 | 240 | 0.06 |
| 30 | 10.06 | 33.68 | 3.32 | 208 | 30 | 10.06 | 33.68 | 3.32 | 25.93 | 208 | 0.08 |
| SPENCER F. BAIRD; July 6, 1952; 0510 GCT; 32°11.5'N, 117°17'W; sounding, 730 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 18°. | | | | | | | | | | | 97.32 |
| 0 | 17.01 | 33.47 | | 358 | 0 | 17.01 | 33.47 | | 24.36 | 358 | 0.00 |
| 9 | 16.99 | 33.48 | | 357 | 10 | 16.98 | 33.48 | | 24.37 | 356 | 0.04 |
| 19 | 13.10 | 33.38 | | 283 | 20 | 12.65 | 33.38 | | 25.23 | 275 | 0.07 |
| 33 | 10.28 | 33.37 | | 234 | 30 | 10.80 | 33.37 | | 25.56 | 243 | 0.09 |
| 47 | 9.68 | 33.48 | | 217 | 50 | 9.70 | 33.53 | | 25.88 | 213 | 0.14 |
| 62 | 9.76 | 33.68 | | 203 | 75 | 9.63 | 33.84 | | 26.13 | 189 | 0.19 |
| 76 | 9.62 | 33.84 | | 189 | 100 | 9.30 | 33.93 | | 26.25 | 178 | 0.24 |
| 95 | 9.38 | 33.91 | | 180 | 150 | 9.11 | 34.09 | | 26.41 | 163 | 0.32 |
| 118 | 9.02 | 33.99 | | 169 | 200 | 8.78 | 34.22 | | 26.56 | 148 | 0.40 |
| 148 | 9.12 | 34.09 | | 163 | 250 | 8.58 | 34.26 | | 26.63 | 142 | 0.48 |
| 194 | 8.80 | 34.21 | | 149 | 300 | 8.24 | 34.29 | | 26.70 | 135 | 0.55 |
| 241 | 8.62 | 34.25 | | 144 | 400 | 7.30 | 34.25 | | 26.81 | 125 | 0.68 |
| 288 | 8.37 | 34.29 | | 137 | 500 | 6.72 | 34.33 | | 26.95 | 111 | 0.81 |
| 388 | 7.38 | 34.25 | | 126 | 600 | (5.88) | (34.35) | | (27.08) | (99) | (0.92) |
| 487 | 6.82 | 34.33 | | 113 | | | | | | | |
| 592 | 5.96 | 34.35 | | 100 | | | | | | | |

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5207

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **97.40** | SPENCER F. BAIRD; July 6, 1952; 0857 GCT; 31°55.5'N, 117°49'W; sounding, 700 fm; wind, 290°, force 2; weather, overcast; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | 15.58 | 33.30 | 6.12 | 339 | 0 | 15.58 | 33.30 | 6.12 | 24.56 | 339 | 0.00 |
| 10 | 15.58 | 33.29 | 6.02 | 340 | 10 | 15.58 | 33.29 | 6.02 | 24.55 | 340 | 0.03 |
| 20 | 15.56 | 33.31 | 6.02 | 338 | 20 | 15.56 | 33.31 | 6.02 | 24.57 | 338 | 0.07 |
| 35 | 14.50 | 33.33 | 6.13 | 314 | 30 | 14.70 | 33.32 | 6.10 | 24.76 | 319 | 0.10 |
| 49 | 12.42 | 33.21 | 6.01 | 283 | 50 | 12.25 | 33.21 | 6.01 | 25.17 | 280 | 0.16 |
| 64 | 10.93 | 33.32 | 4.94 | 249 | 75 | 10.44 | 33.36 | 4.50 | 25.62 | 238 | 0.23 |
| 78 | 10.30 | 33.37 | 4.43 | 235 | 100 | 9.45 | 33.59 | 3.67 | 25.96 | 205 | 0.28 |
| 98 | 9.46 | 33.58 | 3.70 | 206 | 150 | 9.10 | 33.97 | 2.64 | 26.32 | 171 | 0.38 |
| 122 | 9.40 | 33.77 | 3.17 | 191 | 200 | 8.68 | 34.17 | 1.88 | 26.54 | 150 | 0.46 |
| 150 | 9.10 | 33.97 | 2.64 | 171 | 250 | 8.25 | 34.20 | 1.41 | 26.63 | 142 | 0.53 |
| 197 | 8.70 | 34.16 | 1.90 | 151 | 300 | 7.92 | 34.26 | 0.92 | 26.73 | 133 | 0.61 |
| 244 | 8.28 | 34.20 | 1.47 | 142 | 400 | 7.05 | 34.31 | 0.52 | 26.89 | 117 | 0.74 |
| 291 | 7.98 | 34.25 | 0.97 | 134 | 500 | 6.23 | 34.36 | 0.39 | 27.04 | 103 | 0.85 |
| 390 | 7.16 | 34.31 | 0.56 | 119 | 600 | (5.79) | (34.38) | (0.37) | (27.11) | (96) | (0.96) |
| 487 | 6.30 | 34.36 | 0.39 | 104 | | | | | | | |
| 592 | 5.82 | 34.38 | 0.37 | 97 | | | | | | | |
| **97.50** | SPENCER F. BAIRD; July 6, 1952; 1427 GCT; 31°35'N, 118°30'W; sounding, 1170 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 07°. | | | | | | | | | | |
| 0 | 15.18 | 33.19 | 5.98 | 339 | 0 | 15.18 | 33.19 | 5.98 | 24.56 | 339 | 0.00 |
| 10 | 15.18 | 33.21 | 5.86 | 337 | 10 | 15.18 | 33.21 | 5.86 | 24.57 | 337 | 0.03 |
| 20 | 14.78 | 33.25 | 6.11 | 326 | 20 | 14.78 | 33.25 | 6.11 | 24.69 | 326 | 0.07 |
| 35 | 13.89 | 33.39 | 5.97 | 298 | 30 | 14.18 | 33.38 | 6.02 | 24.92 | 304 | 0.10 |
| 50 | 13.34 | 33.37 | 5.76 | 289 | 50 | 13.34 | 33.37 | 5.76 | 25.08 | 289 | 0.16 |
| 65 | 11.89 | 33.27 | 5.36 | 269 | 75 | 10.95 | 33.25 | 5.16 | 25.44 | 254 | 0.23 |
| 79 | 10.65 | 33.24 | 5.05 | 250 | 100 | 9.28 | 33.42 | 4.06 | 25.86 | 215 | 0.29 |
| 100 | 9.28 | 33.42 | 4.06 | 215 | 150 | 8.88 | 33.92 | 2.88 | 26.31 | 172 | 0.38 |
| 124 | 8.90 | 33.69 | 3.66 | 189 | 200 | 8.42 | 34.05 | 2.29 | 26.49 | 155 | 0.47 |
| 151 | 8.88 | 33.92 | 2.87 | 172 | 250 | 7.82 | 34.14 | 1.58 | 26.65 | 140 | 0.54 |
| 198 | 8.46 | 34.05 | 2.32 | 156 | 300 | 7.52 | 34.19 | 1.20 | 26.73 | 132 | 0.61 |
| 246 | 7.84 | 34.13 | 1.61 | 141 | 400 | 6.73 | 34.28 | 0.54 | 26.91 | 115 | 0.74 |
| 293 | 7.57 | 34.18 | 1.27 | 134 | 500 | 6.10 | 34.31 | 0.41 | 27.02 | 105 | 0.86 |
| 395 | 6.78 | 34.28 | 0.55 | 116 | 600 | (5.63) | (34.36) | (0.29) | (27.11) | (96) | (0.97) |
| 494 | 6.14 | 34.31 | 0.42 | 106 | | | | | | | |
| 597 | 5.64 | 34.36 | 0.29 | 96 | | | | | | | |
| **97.60** | SPENCER F. BAIRD; July 6, 1952; 1920 GCT; 31°15'N, 119°12'W; sounding, 1320 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | 15.62 | 33.46 | 5.99 | 328 | 0 | 15.62 | 33.46 | 5.99 | 24.67 | 328 | 0.00 |
| 9 | 15.56 | 33.46 | 6.07 | 327 | 10 | 15.54 | 33.46 | 6.07 | 24.69 | 326 | 0.03 |
| 18 | 14.19 | 33.56 | 6.04 | 291 | 20 | 14.10 | 33.56 | 6.03 | 25.07 | 290 | 0.06 |
| 32 | 13.54 | 33.52 | 5.84 | 282 | 30 | 13.90 | 33.54 | 5.89 | 25.10 | 287 | 0.09 |
| 45 | 11.36 | 33.24 | 5.51 | 262 | 50 | 10.90 | 33.23 | 5.30 | 25.44 | 255 | 0.15 |
| 59 | 10.33 | 33.22 | 4.81 | 246 | 75 | 9.99 | 33.50 | 4.10 | 25.80 | 220 | 0.21 |
| 72 | 10.05 | 33.49 | 4.23 | 222 | 100 | 9.09 | 33.67 | 3.50 | 26.08 | 194 | 0.26 |
| 90 | 9.28 | 33.60 | 3.58 | 202 | 150 | 8.45 | 33.95 | 2.57 | 26.40 | 163 | 0.35 |
| 111 | 8.89 | 33.76 | 3.36 | 184 | 200 | 7.99 | 34.10 | 1.64 | 26.59 | 146 | 0.43 |
| 136 | 8.61 | 33.90 | 2.91 | 169 | 250 | 7.72 | 34.17 | 1.99 | 26.68 | 137 | 0.50 |
| 179 | 8.10 | 34.04 | 1.74 | 152 | 300 | 7.38 | 34.19 | 1.62 | 26.75 | 130 | 0.57 |
| 221 | 7.90 | 34.14 | 1.67 | 141 | 400 | 6.70 | 34.24 | 0.61 | 26.88 | 118 | 0.70 |
| 265 | 7.60 | 34.18 | 2.07 | 134 | 500 | 6.04 | 34.29 | 0.40 | 27.01 | 106 | 0.82 |
| 355 | 7.01 | 34.22 | 0.85 | 123 | | | | | | | |
| 447 | 6.38 | 34.27 | 0.42 | 112 | | | | | | | |
| 547 | 5.80 | 34.31 | 0.40 | 102 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

SPENCER F. BAIRD; July 7, 1952; 0001 GCT; 30°55'N, 119°51'W; sounding, 1880 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 28°. 97.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.19 | 33.15 | 5.78 | 363 | 0 | 16.19 | 33.15 | 5.78 | 24.30 | 363 | 0.00 |
| 8 | 16.09 | 33.15 | 5.83 | 361 | 10 | 16.05 | 33.15 | 5.82 | 24.34 | 360 | 0.04 |
| 17 | 15.84 | 33.19 | 5.81 | 353 | 20 | 15.80 | 33.22 | 5.82 | 24.45 | 349 | 0.07 |
| 31 | 15.68 | 33.26 | 5.82 | 344 | 30 | 15.69 | 33.26 | 5.82 | 24.50 | 344 | 0.11 |
| 49 | 14.41 | 33.08 | 6.15 | 331 | 50 | 14.30 | 33.07 | 6.15 | 24.66 | 329 | 0.17 |
| 62 | 13.49 | 33.04 | 6.17 | 316 | 75 | 12.89 | 33.06 | 6.13 | 24.93 | 303 | 0.25 |
| 75 | 12.89 | 33.06 | 6.13 | 303 | 100 | 11.20 | 33.13 | 5.60 | 25.31 | 268 | 0.33 |
| 95 | 11.91 | 33.12 | 5.68 | 281 | 150 | 9.05 | 33.52 | 4.17 | 25.97 | 204 | 0.44 |
| 117 | 9.96 | 33.16 | 5.22 | 245 | 200 | 8.38 | 34.06 | 3.44 | 26.50 | 154 | 0.54 |
| 140 | 9.21 | 33.39 | 4.31 | 216 | 250 | 7.98 | 34.14 | 2.69 | 26.62 | 142 | 0.61 |
| 184 | 8.57 | 33.95 | 3.65 | 165 | 300 | 7.79 | 34.12 | 1.56 | 26.63 | 141 | 0.68 |
| 233 | 8.04 | 34.15 | 3.01 | 143 | 400 | 7.12 | 34.25 | 0.75 | 26.83 | 123 | 0.82 |
| 285 | 7.86 | 34.11 | 1.76 | 143 | 500 | 6.36 | 34.31 | 0.41 | 26.98 | 108 | 0.94 |
| 374 | 7.31 | 34.22 | 0.89 | 127 | | | | | | | |
| 472 | 6.56 | 34.31 | 0.47 | 111 | | | | | | | |
| 577 | 5.82 | 34.28 | 0.38 | 104 | | | | | | | |

SPENCER F. BAIRD; July 7, 1952; 0505 GCT; 30°35'N, 120°30'W; sounding, 2100 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 27°. 97.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.25 | 33.23 | 5.72 | 358 | 0 | 16.25 | 33.23 | 5.72 | 24.35 | 358 | 0.00 |
| 9 | 16.25 | 33.23 | 5.72 | 358 | 10 | 16.25 | 33.23 | 5.72 | 24.35 | 358 | 0.04 |
| 18 | 16.26 | 33.17 | 5.75 | 363 | 20 | 16.26 | 33.17 | 5.75 | 24.30 | 363 | 0.07 |
| 31 | 16.11 | 33.20 | 5.72 | 358 | 30 | 16.14 | 33.20 | 5.73 | 24.35 | 358 | 0.11 |
| 49 | 14.88 | 33.09 | 6.01 | 340 | 50 | 14.80 | 33.09 | 6.02 | 24.56 | 338 | 0.18 |
| 63 | 14.09 | 33.12 | 6.15 | 322 | 75 | 13.15 | 33.15 | 5.97 | 24.95 | 301 | 0.26 |
| 76 | 13.12 | 33.15 | 5.97 | 301 | 100 | 11.42 | 33.07 | 5.64 | 25.22 | 276 | 0.33 |
| 97 | 11.56 | 33.07 | 5.69 | 278 | 150 | 9.55 | 33.26 | 4.68 | 25.69 | 231 | 0.46 |
| 117 | 10.92 | 33.13 | 5.36 | 263 | | | | | | | |
| 142 | 9.58 | 33.21 | 4.82 | 235 | | | | | | | |
| 186 | 9.00 | 33.68 | 3.74 | 191 | | | | | | | |

SPENCER F. BAIRD; July 7, 1952; 0950 GCT; 30°15'N, 121°11'W; sounding, 2000 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 18°. 97.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.11 | 33.39 | - | 366 | 0 | 17.11 | 33.39 | | 24.27 | 366 | 0.00 |
| 9 | 17.12 | 33.39 | 5.70 | 366 | 10 | 17.12 | 33.39 | 5.70 | 24.27 | 366 | 0.04 |
| 19 | 17.12 | 33.42 | 5.55 | 364 | 20 | 17.12 | 33.42 | 5.55 | 24.30 | 364 | 0.07 |
| 33 | 17.14 | 33.40 | 5.59 | 366 | 30 | 17.13 | 33.40 | 5.58 | 24.28 | 365 | 0.11 |
| 52 | 16.68 | 33.39 | 5.56 | 356 | 50 | 16.79 | 33.39 | 5.57 | 24.35 | 359 | 0.18 |
| 66 | 15.54 | 33.33 | 5.93 | 336 | 75 | 15.25 | 33.33 | 5.90 | 24.65 | 330 | 0.27 |
| 81 | 15.08 | 33.34 | 5.88 | 326 | 100 | 14.55 | 33.33 | 5.85 | 24.80 | 315 | 0.35 |
| 103 | 14.40 | 33.33 | 5.84 | 312 | 150 | 11.10 | 33.24 | 5.17 | 25.41 | 258 | 0.49 |
| 128 | 12.80 | 33.17 | 3.88 | 293 | 200 | 9.09 | 33.59 | 4.29 | 26.02 | 200 | 0.61 |
| 152 | 10.87 | 33.26 | 5.17 | 252 | 250 | 8.25 | 33.95 | 3.11 | 26.43 | 160 | 0.70 |
| 202 | 9.04 | 33.60 | 4.19 | 198 | 300 | 7.68 | 33.95 | 2.90 | 26.52 | 152 | 0.78 |
| 255 | 8.18 | 33.96 | 3.06 | 159 | 400 | 6.40 | 34.08 | 2.13 | 26.80 | 126 | 0.93 |
| 300 | 7.68 | 33.95 | 2.90 | 152 | 500 | 5.81 | 34.21 | 0.88 | 26.97 | 109 | 1.05 |
| 403 | 6.38 | 34.09 | 2.10 | 125 | 600 | 5.36 | 34.33 | 0.38 | 27.12 | 95 | 1.16 |
| 507 | 5.78 | 34.22 | 0.80 | 108 | | | | | | | |
| 617 | 5.30 | 34.34 | 0.34 | 94 | | | | | | | |

SPENCER F. BAIRD; July 5, 1952; 2237 GCT; 31°42.5'N, 116°43.5'W; sounding, 110 fm; wind, 320°, force 1; weather, overcast; sea, slight; wire angle, missing. 100.29

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.12 | 33.62 | 8.48 | 266 | 0 | 13.12 | 33.62 | 8.48 | 25.32 | 266 | 0.00 |
| 10 | 11.60 | 33.67 | 7.04 | 235 | 10 | 11.60 | 33.67 | 7.04 | 25.65 | 235 | 0.03 |
| 20 | 10.48 | 33.66 | 3.85 | 216 | 20 | 10.48 | 33.66 | 3.85 | 25.84 | 216 | 0.05 |
| 30 | 10.03 | 33.73 | 3.33 | 204 | 30 | 10.03 | 33.73 | 3.33 | 25.98 | 204 | 0.07 |
| 49 | 9.81 | 33.78 | 3.14 | 197 | 50 | 9.79 | 33.78 | 3.12 | 26.06 | 196 | 0.11 |
| 75 | 9.44 | 33.84 | 2.77 | 186 | 75 | 9.44 | 33.84 | 2.77 | 26.16 | 186 | 0.16 |

SIO

CCOFI
5207

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| 100.30 | SPENCER F. BAIRD; July 5, 1952; 2105 GCT; 31°40.5'N, 116°47'W; sounding, 240 fm; wind, 320°, force 1; weather, overcast; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | 13.88 | 33.60 | 7.71 | 282 | 0 | 13.88 | 33.60 | 7.71 | 25.15 | 282 | 0.00 |
| 10 | 11.06 | 33.60 | 5.02 | 230 | 10 | 11.06 | 33.60 | 5.02 | 25.70 | 230 | 0.03 |
| 25 | 10.20 | 33.71 | 3.62 | 208 | 20 | 10.41 | 33.65 | 3.94 | 25.85 | 216 | 0.05 |
| 50 | 9.68 | 33.78 | 3.08 | 195 | 30 | 10.10 | 33.72 | 3.41 | 25.96 | 206 | 0.07 |
| 74 | 9.36 | 33.91 | - | 180 | 50 | 9.68 | 33.78 | 3.08 | 26.07 | 195 | 0.11 |
| 98 | 9.30 | 33.96 | 2.93 | 175 | 75 | 9.35 | 33.91 | | 26.23 | 180 | 0.16 |
| 151 | 9.30 | 34.04 | 2.29 | 169 | 100 | 9.30 | 33.96 | 2.91 | 26.28 | 175 | 0.20 |
| 198 | 9.08 | 34.16 | 1.70 | 157 | 150 | 9.30 | 34.04 | 2.31 | 26.34 | 169 | 0.29 |
| 247 | 8.76 | 34.27 | 1.42 | 144 | 200 | 9.05 | 34.17 | 1.69 | 26.48 | 156 | 0.37 |
| 295 | 8.50 | 34.27 | 1.02 | 140 | 250 | 8.74 | 34.27 | 1.40 | 26.61 | 144 | 0.45 |
| 350 | 8.17 | 34.31 | 0.78 | 133 | 300 | 8.48 | 34.27 | 1.00 | 26.65 | 140 | 0.52 |
| 100.40 | SPENCER F. BAIRD; July 5, 1952; 1410 GCT; 31°21'N, 117°27'W; sounding, 1100 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 08°. | | | | | | | | | | |
| 0 | 16.98 | 33.38 | 5.65 | 364 | 0 | 16.98 | 33.38 | 5.65 | 24.30 | 364 | 0.00 |
| 10 | 16.98 | 33.37 | 5.62 | 364 | 10 | 16.98 | 33.37 | 5.62 | 24.29 | 364 | 0.04 |
| 25 | 16.79 | 33.41 | 5.68 | 357 | 20 | 16.97 | 33.40 | 5.67 | 24.32 | 362 | 0.07 |
| 55 | 11.20 | 33.39 | 5.12 | 248 | 30 | 15.35 | 33.41 | 5.66 | 24.69 | 326 | 0.11 |
| 78 | 10.23 | 33.30 | 3.98 | 239 | 50 | 11.80 | 33.40 | 5.28 | 25.41 | 258 | 0.17 |
| 108 | 9.26 | 33.49 | 3.63 | 210 | 75 | 10.38 | 33.30 | 4.00 | 25.58 | 241 | 0.23 |
| 162 | 8.96 | 33.68 | 2.46 | 191 | 100 | 9.40 | 33.42 | 3.77 | 25.84 | 217 | 0.29 |
| 215 | 8.20 | 33.99 | 2.13 | 157 | 150 | 9.12 | 33.63 | 2.61 | 26.05 | 197 | 0.39 |
| 272 | 8.12 | 34.24 | 1.09 | 137 | 200 | 8.32 | 33.92 | 2.28 | 26.40 | 164 | 0.48 |
| 321 | 7.90 | 34.33 | 0.68 | 127 | 250 | 8.15 | 34.15 | 1.46 | 26.61 | 144 | 0.56 |
| 431 | 6.84 | 34.34 | 0.40 | 112 | 300 | 8.02 | 34.31 | 0.79 | 26.75 | 130 | 0.63 |
| 537 | 6.08 | 34.38 | 0.25 | 100 | 400 | 7.14 | 34.34 | 0.47 | 26.90 | 116 | 0.76 |
| 643 | 5.50 | 34.40 | 0.25 | 91 | 500 | 6.31 | 34.37 | 0.28 | 27.04 | 103 | 0.88 |
| 850 | 4.57 | 34.44 | 0.38 | 78 | 600 | 5.72 | 34.39 | 0.25 | 27.13 | 95 | 0.98 |
| 1060 | 3.90 | 34.51 | 0.60 | 66 | 700 | 5.23 | 34.41 | 0.26 | 27.20 | 87 | 1.08 |
| 1263 | 3.38 | 34.56 | 0.82 | 57 | 800 | 4.76 | 34.43 | 0.32 | 27.27 | 81 | 1.18 |
| | | | | | 1000 | 4.07 | 34.49 | 0.52 | 27.40 | 69 | 1.34 |
| 100.50 | SPENCER F. BAIRD; July 5, 1952; 0837 GCT; 31°01'N, 118°07'W; sounding, 700 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 16°. | | | | | | | | | | |
| 0 | 16.83 | 33.42 | 5.44 | 357 | 0 | 16.83 | 33.42 | 5.44 | 24.36 | 357 | 0.00 |
| 9 | 16.84 | 33.42 | 5.48 | 358 | 10 | 16.84 | 33.42 | 5.47 | 24.36 | 358 | 0.04 |
| 19 | 16.85 | 33.42 | 5.39 | 358 | 20 | 16.85 | 33.42 | 5.40 | 24.36 | 358 | 0.07 |
| 33 | 15.85 | 33.41 | 5.84 | 337 | 30 | 16.25 | 33.42 | 5.79 | 24.50 | 345 | 0.11 |
| 48 | 13.26 | 33.35 | 5.86 | 289 | 50 | 12.60 | 33.35 | 5.77 | 25.21 | 276 | 0.17 |
| 62 | 10.98 | 33.34 | 4.93 | 248 | 75 | 10.34 | 33.45 | 4.25 | 25.71 | 230 | 0.23 |
| 76 | 10.36 | 33.45 | 4.19 | 230 | 100 | 9.68 | 33.74 | 3.33 | 26.04 | 198 | 0.29 |
| 95 | 9.80 | 33.68 | 3.53 | 204 | 150 | 9.30 | 34.03 | 2.51 | 26.33 | 170 | 0.38 |
| 118 | 9.48 | 33.91 | 2.81 | 182 | 200 | 8.50 | 34.15 | 2.07 | 26.55 | 149 | 0.46 |
| 145 | 9.33 | 34.01 | 2.52 | 172 | 250 | 8.08 | 34.24 | 1.34 | 26.69 | 136 | 0.53 |
| 190 | 8.60 | 34.12 | 2.25 | 153 | 300 | 7.64 | 34.25 | 0.93 | 26.76 | 130 | 0.60 |
| 235 | 8.20 | 34.23 | 1.54 | 139 | 400 | 6.74 | 34.27 | 0.58 | 26.90 | 116 | 0.73 |
| 280 | 7.81 | 34.25 | 1.01 | 132 | 500 | 6.06 | 34.32 | 0.39 | 27.03 | 104 | 0.85 |
| 378 | 6.91 | 34.26 | 0.65 | 119 | | | | | | | |
| 472 | 6.22 | 34.31 | 0.43 | 107 | | | | | | | |
| 577 | 5.66 | 34.34 | 0.31 | 98 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| SPENCER F. BAIRD; July 5, 1952; 0256 GCT; 30°40.5'N, 118°47.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 26°. | | | | | | | | | | | 100.60 |
| 0 | 16.47 | 33.30 | 5.71 | 358 | 0 | 16.47 | 33.30 | 5.71 | 24.35 | 358 | 0.00 |
| 9 | 16.46 | 33.24 | 5.69 | 362 | 10 | 16.46 | 33.24 | 5.70 | 24.31 | 362 | 0.04 |
| 22 | 16.45 | 33.25 | 5.70 | 361 | 20 | 16.45 | 33.25 | 5.70 | 24.32 | 361 | 0.07 |
| 45 | 14.28 | 33.17 | 6.12 | 322 | 30 | 16.43 | 33.22 | 5.76 | 24.30 | 363 | 0.11 |
| 68 | 12.28 | 33.19 | 5.81 | 282 | 50 | 13.60 | 33.17 | 6.11 | 24.88 | 308 | 0.18 |
| 90 | 11.24 | 33.22 | 5.13 | 262 | 75 | 11.95 | 33.20 | 5.55 | 25.22 | 276 | 0.25 |
| 138 | 9.29 | 33.54 | - | 206 | 100 | 10.62 | 33.25 | 4.88 | 25.50 | 249 | 0.32 |
| 181 | 8.58 | 33.83 | 3.28 | 174 | 150 | 9.04 | 33.64 | 3.83 | 26.07 | 195 | 0.43 |
| 225 | 8.14 | 34.00 | 2.58 | 155 | 200 | 8.38 | 33.92 | 3.00 | 26.39 | 165 | 0.52 |
| 269 | 7.77 | 34.07 | 1.79 | 145 | 250 | 7.93 | 34.04 | 2.07 | 26.55 | 149 | 0.60 |
| 361 | 7.04 | 34.22 | 0.95 | 124 | 300 | 7.50 | 34.13 | 1.40 | 26.68 | 137 | 0.67 |
| 449 | 6.44 | 34.27 | 0.54 | 112 | 400 | 6.77 | 34.24 | 0.74 | 26.87 | 119 | 0.81 |
| 541 | 5.82 | 34.34 | 0.35 | 100 | 500 | 6.09 | 34.31 | 0.42 | 27.02 | 105 | 0.92 |
| 722 | 5.00 | 34.42 | 0.34 | 84 | 600 | 5.54 | 34.38 | 0.34 | 27.14 | 93 | 1.03 |
| 906 | 4.29 | 34.45 | 0.48 | 74 | 700 | 5.09 | 34.41 | 0.34 | 27.22 | 86 | 1.13 |
| 1104 | 3.68 | 34.56 | 0.71 | 60 | 800 | 4.69 | 34.43 | 0.39 | 27.28 | 80 | 1.22 |
| | | | | | 1000 | 3.99 | 34.49 | 0.58 | 27.40 | 68 | 1.38 |
| SPENCER F. BAIRD; July 4, 1952; 2122, 2155 GCT; 30°20.5'N, 119°27.5'W; sounding, 2000 fm; wind, 340°, force 3; weather, overcast; sea, moderate; wire angle, 10°, 15°. | | | | | | | | | | | 100.70 |
| 0 | 16.17 | 33.18 | 5.81 | 360 | 0 | 16.17 | 33.18 | 5.81 | 24.33 | 360 | 0.00 |
| 10 | 16.10 | 33.22 | 5.84 | 356 | 10 | 16.10 | 33.22 | 5.84 | 24.38 | 356 | 0.04 |
| 20 | 15.36 | 33.14 | 6.03 | 346 | 20 | 15.36 | 33.14 | 6.03 | 24.48 | 346 | 0.07 |
| 35 | 14.99 | 33.16 | 5.98 | 337 | 30 | 15.13 | 33.15 | 5.99 | 24.54 | 341 | 0.11 |
| 50 | 14.16 | 33.20 | 6.21 | 317 | 50 | 14.16 | 33.20 | 6.21 | 24.78 | 317 | 0.17 |
| 64 | 13.20 | 33.13 | 6.09 | 304 | 75 | 12.87 | 33.15 | 6.05 | 25.01 | 296 | 0.25 |
| 79 | 12.72 | 33.16 | 6.01 | 292 | 100 | 10.76 | 33.13 | 5.18 | 25.38 | 260 | 0.32 |
| 98 | 10.92 | 33.13 | 5.27 | 263 | 150 | 8.90 | 33.70 | 3.64 | 26.14 | 189 | 0.43 |
| 122 | 9.86 | 33.40 | 4.25 | 226 | 200 | 8.30 | 33.89 | 3.30 | 26.38 | 166 | 0.52 |
| 149 | 8.91 | 33.69 | 3.64 | 189 | 250 | 8.08 | 34.09 | 2.15 | 26.57 | 148 | 0.60 |
| 193 | 8.37 | 33.86 | 3.50 | 169 | 300 | 7.62 | 34.14 | 1.58 | 26.68 | 137 | 0.68 |
| 239 | 8.18 | 34.07 | 2.24 | 151 | 400 | 6.70 | 34.23 | 0.76 | 26.87 | 119 | 0.81 |
| | | | | | 500 | 6.04 | 34.26 | 0.40 | 26.98 | 108 | 0.93 |
| 274 | 7.85 | 34.11 | 1.93 | 143 | | | | | | | |
| 370 | 6.94 | 34.22 | 0.91 | 122 | | | | | | | |
| 467 | 6.26 | 34.25 | 0.49 | 112 | | | | | | | |
| 570 | 5.68 | 34.30 | 0.31 | 101 | | | | | | | |
| SPENCER F. BAIRD; July 4, 1952; 1555 GCT; 30°00'N, 120°09'W; sounding, 2000 fm; wind, 340°, force 3; weather, overcast; sea, slight; wire angle, 23°. | | | | | | | | | | | 100.80 |
| 0 | 16.10 | 33.19 | 6.32 | 358 | 0 | 16.10 | 33.19 | 6.32 | 24.35 | 358 | 0.00 |
| 9 | 16.12 | 33.17 | 6.07 | 360 | 10 | 16.12 | 33.17 | 6.07 | 24.33 | 360 | 0.04 |
| 23 | 16.10 | 33.21 | 6.12 | 357 | 20 | 16.11 | 33.20 | 6.10 | 24.36 | 358 | 0.07 |
| 46 | - | 33.21 | 6.12 | | 30 | 16.10 | 33.22 | 6.12 | 24.38 | 356 | 0.11 |
| 68 | 13.62 | 33.07 | 6.49 | 316 | 50 | 15.05 | 33.20 | 6.16 | 24.60 | 335 | 0.18 |
| 91 | 12.64 | 33.07 | 6.06 | 298 | 75 | 13.33 | 33.07 | 6.31 | 24.85 | 311 | 0.26 |
| 138 | 10.40 | 33.27 | 5.36 | 244 | 100 | 12.17 | 33.09 | 5.95 | 25.10 | 288 | 0.33 |
| 180 | 9.05 | 33.65 | 4.23 | 194 | 150 | 10.10 | 33.35 | 5.02 | 25.67 | 233 | 0.46 |
| 221 | 8.25 | 33.91 | 2.92 | 163 | 200 | 8.61 | 33.82 | 3.70 | 26.28 | 175 | 0.57 |
| 264 | 7.66 | 34.00 | 1.50 | 148 | 250 | 7.83 | 33.98 | 1.82 | 26.52 | 152 | 0.65 |
| 354 | 6.84 | 34.10 | 0.76 | 130 | 300 | 7.30 | 34.04 | 1.15 | 26.64 | 141 | 0.73 |
| 438 | 6.22 | 34.22 | 0.71 | 113 | 400 | 6.45 | 34.17 | 0.75 | 26.86 | 120 | 0.86 |
| 528 | 5.93 | 34.25 | 0.52 | 108 | 500 | 6.02 | 34.25 | 0.56 | 26.98 | 109 | 0.98 |
| 705 | 5.08 | 34.38 | 0.43 | 88 | 600 | 5.63 | 34.30 | 0.46 | 27.07 | 100 | 1.10 |
| 884 | 4.34 | 34.39 | 0.67 | 79 | 700 | 5.11 | 34.38 | 0.43 | 27.19 | 88 | 1.20 |
| 1086 | 3.71 | 34.51 | 0.72 | 64 | 800 | 4.67 | 34.39 | 0.55 | 27.25 | 83 | 1.29 |
| | | | | | 1000 | 3.94 | 34.45 | 0.70 | 27.38 | 71 | 1.46 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **100.90** | SPENCER F. BAIRD; July 4, 1952; 1047 GCT; 29°40.5'N, 120°47'W; sounding, 2100 fm; wind, 320°, force 3; weather, missing; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 16.66 | 33.21 | 5.98 | 369 | 0 | 16.66 | 33.21 | 5.98 | 24.24 | 369 | 0.00 |
| 9 | 16.66 | 33.21 | 5.72 | 369 | 10 | 16.66 | 33.21 | 5.70 | 24.24 | 369 | 0.04 |
| 20 | 16.59 | 33.24 | 5.65 | 365 | 20 | 16.59 | 33.24 | 5.65 | 24.28 | 365 | 0.07 |
| 35 | 16.49 | 33.30 | 5.68 | 359 | 30 | 16.51 | 33.28 | 5.68 | 24.33 | 360 | 0.11 |
| 49 | 15.75 | 33.44 | 5.08 | 332 | 50 | 15.73 | 33.45 | 5.09 | 24.64 | 331 | 0.18 |
| 64 | 15.48 | 33.46 | 5.98 | 325 | 75 | 14.99 | 33.35 | 6.05 | 24.72 | 323 | 0.26 |
| 79 | 14.38 | 33.30 | 6.08 | 314 | 100 | 13.08 | 33.21 | 5.90 | 25.01 | 296 | 0.34 |
| 98 | 13.18 | 33.21 | 5.95 | 297 | 150 | 9.80 | 33.40 | 4.68 | 25.76 | 225 | 0.47 |
| 121 | 11.41 | 33.26 | 5.40 | 262 | 200 | 8.91 | 33.93 | 3.48 | 26.32 | 172 | 0.57 |
| 150 | 9.80 | 33.40 | 4.68 | 225 | 250 | 7.96 | 33.97 | 3.07 | 26.49 | 155 | 0.66 |
| 196 | 8.99 | 33.92 | 3.49 | 174 | 300 | 7.39 | 34.08 | 2.08 | 26.66 | 139 | 0.73 |
| 243 | 8.04 | 33.96 | 3.21 | 157 | 400 | 6.56 | 34.19 | 1.04 | 26.86 | 120 | 0.87 |
| 289 | 7.51 | 34.06 | 2.21 | 142 | 500 | 6.06 | 34.25 | 0.54 | 26.97 | 109 | 0.99 |
| 390 | 6.62 | 34.18 | 1.11 | 121 | 600 | (5.43) | (34.33) | (0.60) | (27.12) | (96) | (1.10) |
| 485 | 6.14 | 34.24 | 0.54 | 111 | | | | | | | |
| 592 | 5.49 | 34.32 | 0.60 | 97 | | | | | | | |
| **100.100** | SPENCER F. BAIRD; July 4, 1952; 0548 GCT; 29°20'N, 121°27'W; sounding, 2000 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | 17.52 | 33.44 | 5.68 | 371 | 0 | 17.52 | 33.44 | 5.68 | 24.22 | 371 | 0.00 |
| 10 | 17.52 | 33.43 | 5.81 | 372 | 10 | 17.52 | 33.43 | 5.81 | 24.21 | 372 | 0.04 |
| 25 | 17.44 | 33.44 | 5.69 | 370 | 20 | 17.48 | 33.44 | 5.74 | 24.22 | 371 | 0.07 |
| 50 | 16.52 | 33.50 | 5.81 | 345 | 30 | 17.00 | 33.45 | 5.70 | 24.35 | 359 | 0.11 |
| 75 | 15.97 | 33.65 | 6.00 | 322 | 50 | 16.52 | 33.50 | 5.81 | 24.50 | 345 | 0.18 |
| 99 | 15.61 | 33.68 | 5.91 | 312 | 75 | 15.97 | 33.65 | 6.00 | 24.74 | 322 | 0.27 |
| 151 | 10.92 | 33.33 | 5.00 | 248 | 100 | 15.59 | 33.68 | 5.92 | 24.85 | 311 | 0.35 |
| 199 | 9.02 | 33.71 | 3.81 | 190 | 150 | 11.00 | 33.33 | 5.03 | 25.50 | 249 | 0.49 |
| 245 | 8.28 | 33.98 | 3.52 | 159 | 200 | 9.00 | 33.72 | 3.80 | 26.14 | 189 | 0.60 |
| 292 | 7.76 | 34.04 | 2.78 | 147 | 250 | 8.21 | 33.99 | 3.44 | 26.47 | 157 | 0.69 |
| 392 | 6.60 | 34.11 | 1.34 | 126 | 300 | 7.68 | 34.05 | 2.62 | 26.60 | 145 | 0.76 |
| 487 | 5.98 | 34.22 | 0.71 | 110 | 400 | 6.53 | 34.11 | 1.28 | 26.80 | 125 | 0.90 |
| 586 | 5.45 | 34.27 | 0.40 | 100 | 500 | 5.91 | 34.23 | 0.68 | 26.98 | 109 | 1.03 |
| 779 | 4.55 | 34.36 | 0.36 | 84 | 600 | 5.38 | 34.28 | 0.39 | 27.08 | 99 | 1.14 |
| 972 | 4.03 | 34.47 | 0.50 | 70 | 700 | 4.86 | 34.32 | 0.33 | 27.17 | 90 | 1.24 |
| 1174 | 3.52 | 34.53 | 0.81 | 61 | 800 | 4.50 | 34.37 | 0.36 | 27.25 | 83 | 1.33 |
| | | | | | 1000 | 3.96 | 34.49 | 0.54 | 27.41 | 68 | 1.50 |
| **105.32** | SPENCER F. BAIRD; July 2, 1952; 1245 GCT; 30°45'N, 116°20.5'W; sounding, 42 fm; wind, 330°, force 2; weather, overcast; sea, slight; wire angle, 04°. | | | | | | | | | | |
| 0 | 13.76 | 33.78 | 8.36 | 267 | 0 | 13.76 | 33.78 | 8.36 | 25.31 | 267 | 0.00 |
| 10 | 12.04 | 33.51 | 6.18 | 254 | 10 | 12.04 | 33.51 | 6.18 | 25.45 | 254 | 0.03 |
| 20 | 12.34 | 33.66 | 7.05 | 249 | 20 | 12.34 | 33.66 | 7.05 | 25.50 | 249 | 0.05 |
| 31 | 11.00 | 33.56 | 4.92 | 232 | 30 | 11.12 | 33.56 | 5.15 | 25.65 | 234 | 0.08 |
| 50 | 10.11 | 33.76 | 3.40 | 203 | 50 | 10.11 | 33.76 | 3.40 | 25.99 | 203 | 0.12 |
| **105.35** | SPENCER F. BAIRD; July 2, 1952; 1448 GCT; 30°39.5'N, 116°32.5'W; sounding, 660 fm; wind, 320°, force 3; weather, overcast; sea, slight; wire angle, 15°. | | | | | | | | | | |
| 0 | 16.86 | 33.48 | 5.76 | 354 | 0 | 16.86 | 33.48 | 5.76 | 24.40 | 354 | 0.00 |
| 10 | 16.86 | 33.44 | 5.69 | 357 | 10 | 16.86 | 33.44 | 5.69 | 24.37 | 357 | 0.04 |
| 20 | 16.85 | 33.46 | 5.78 | 355 | 20 | 16.85 | 33.46 | 5.78 | 24.39 | 355 | 0.07 |
| 34 | 16.53 | 33.41 | 5.95 | 351 | 30 | 16.84 | 33.46 | 5.87 | 24.39 | 355 | 0.11 |
| 48 | 13.53 | 33.28 | 6.36 | 299 | 50 | 13.40 | 33.26 | 6.34 | 24.99 | 298 | 0.17 |
| 62 | 11.97 | 33.22 | 4.90 | 274 | 75 | 10.80 | 33.30 | 4.85 | 25.51 | 248 | 0.24 |
| 76 | 10.66 | 33.29 | 4.85 | 247 | 100 | 9.85 | 33.57 | 3.80 | 25.88 | 213 | 0.30 |
| 95 | 9.86 | 33.51 | 4.11 | 217 | 150 | 9.33 | 33.84 | 3.08 | 26.18 | 185 | 0.40 |
| 118 | 9.82 | 33.74 | 3.32 | 200 | 200 | 8.72 | 34.06 | 2.47 | 26.45 | 159 | 0.49 |
| 144 | 9.50 | 33.82 | 3.15 | 189 | 250 | 8.34 | 34.18 | 1.76 | 26.60 | 145 | 0.56 |
| 190 | 8.74 | 34.02 | 2.59 | 162 | 300 | 7.83 | 34.23 | 1.19 | 26.72 | 134 | 0.64 |
| 236 | 8.52 | 34.16 | 2.01 | 149 | 400 | 7.05 | 34.29 | 0.66 | 26.87 | 119 | 0.77 |
| 279 | 8.00 | 34.21 | 1.38 | 138 | 500 | 6.40 | 34.35 | 0.42 | 27.01 | 106 | 0.89 |
| 379 | 7.21 | 34.27 | 0.73 | 122 | | | | | | | |
| 473 | 6.56 | 34.34 | 0.47 | 109 | | | | | | | |
| 577 | 6.01 | 34.37 | 0.30 | 100 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; July 2, 1952; 1831 GCT; 30°29'N, 116°55'W; sounding, 860 fm; wind, 340°, force 1; weather, overcast; sea, slight; wire angle, 07°. 105.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.75 | 33.37 | 5.65 | 359 | 0 | 16.75 | 33.37 | 5.65 | 24.34 | 359 | 0.00 |
| 10 | 16.74 | 33.39 | 5.70 | 358 | 10 | 16.74 | 33.39 | 5.70 | 24.36 | 358 | 0.04 |
| 20 | 16.72 | 33.37 | 5.75 | 359 | 20 | 16.72 | 33.37 | 5.75 | 24.35 | 359 | 0.07 |
| 35 | 16.74 | 33.39 | 5.66 | 358 | 30 | 16.73 | 33.39 | 5.70 | 24.36 | 357 | 0.11 |
| 50 | 13.65 | 33.21 | 6.14 | 306 | 50 | 13.65 | 33.21 | 6.14 | 24.90 | 306 | 0.17 |
| 66 | 12.49 | 33.20 | 5.83 | 285 | 75 | 11.70 | 33.20 | 5.45 | 25.27 | 271 | 0.25 |
| 80 | 11.18 | 33.21 | 5.22 | 261 | 100 | 10.43 | 33.41 | 4.30 | 25.66 | 234 | 0.31 |
| 98 | 10.52 | 33.38 | 4.39 | 238 | 150 | 8.87 | 33.84 | 2.24 | 26.25 | 178 | 0.41 |
| 123 | 9.55 | 33.68 | 3.55 | 200 | 200 | 8.34 | 33.99 | 2.69 | 26.45 | 159 | 0.50 |
| 151 | 8.84 | 33.84 | 2.23 | 177 | 250 | (7.83) | (34.11) | (2.38) | (26.62) | (143) | (0.58) |
| 199 | 8.36 | 33.98 | 2.69 | 160 | | | | | | | |
| 247 | 7.86 | 34.10 | 2.42 | 144 | | | | | | | |

SPENCER F. BAIRD; July 3, 1952; 0021 GCT; 30°10'N, 117°31'W; sounding, 1037 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 20°. 105.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.51 | 33.38 | 5.75 | 353 | 0 | 16.51 | 33.38 | 5.75 | 24.41 | 353 | 0.00 |
| 9 | 16.47 | 33.35 | 5.85 | 354 | 10 | 16.47 | 33.35 | 5.85 | 24.39 | 354 | 0.04 |
| 19 | 16.27 | 33.34 | 5.80 | 351 | 20 | 16.26 | 33.34 | 5.81 | 24.43 | 351 | 0.07 |
| 33 | - | 33.38 | 6.00 | | 30 | 16.00 | 33.38 | 5.97 | 24.52 | 342 | 0.11 |
| 48 | 12.05 | 33.23 | 5.65 | 275 | 50 | 11.87 | 33.23 | 5.42 | 25.26 | 272 | 0.17 |
| 61 | 11.02 | 33.25 | 4.44 | 256 | 75 | 10.19 | 33.35 | 4.39 | 25.65 | 235 | 0.23 |
| 75 | 10.19 | 33.35 | 4.39 | 235 | 100 | 9.65 | 33.63 | 3.36 | 25.96 | 205 | 0.29 |
| 93 | 9.74 | 33.55 | 3.54 | 213 | 150 | 9.09 | 33.89 | 3.20 | 26.26 | 177 | 0.38 |
| 115 | 9.49 | 33.78 | 3.20 | 192 | 200 | 8.38 | 34.09 | 2.17 | 26.52 | 152 | 0.47 |
| 140 | 9.21 | 33.86 | 3.39 | 181 | 250 | 7.93 | 34.21 | 1.56 | 26.68 | 137 | 0.54 |
| 184 | 8.58 | 34.00 | 2.35 | 162 | 300 | 7.57 | 34.24 | 0.98 | 26.76 | 129 | 0.61 |
| 229 | 8.10 | 34.20 | 1.84 | 140 | 400 | 6.96 | 34.31 | 0.59 | 26.90 | 116 | 0.74 |
| 273 | 7.76 | 34.12u | 1.28 | | 500 | 6.20 | 34.33 | 0.56 | 27.02 | 105 | 0.85 |
| 369 | 7.16 | 34.29 | 0.55 | 120 | | | | | | | |
| 464 | 6.48 | 34.33 | 0.66 | 108 | | | | | | | |
| 567 | 5.70 | 34.33 | 0.30 | 99 | | | | | | | |

SPENCER F. BAIRD; July 3, 1952; 0559 GCT; 29°50'N, 118°16'W; sounding, 1900 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 20°. 105.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.26 | 33.24 | 5.75 | 358 | 0 | 16.26 | 33.24 | 5.75 | 24.36 | 358 | 0.00 |
| 9 | 16.26 | 33.25 | 5.76 | 357 | 10 | 16.26 | 33.25 | 5.76 | 24.36 | 357 | 0.04 |
| 19 | 16.18 | 33.25 | 5.78 | 355 | 20 | 16.18 | 33.25 | 5.76 | 24.38 | 355 | 0.07 |
| 33 | - | 33.23 | 5.72 | | 30 | 16.12 | 33.23 | 5.73 | 24.38 | 356 | 0.11 |
| 47 | 15.87 | 33.26 | 5.85 | 348 | 50 | 15.44 | 33.26 | 6.00 | 24.56 | 339 | 0.18 |
| 61 | 13.43 | 33.12 | 6.26 | 309 | 75 | 12.21 | 33.12 | 6.04 | 25.11 | 286 | 0.26 |
| 75 | 12.21 | 33.12 | 6.04 | 286 | 100 | 11.00 | 33.18 | 5.29 | 25.38 | 260 | 0.32 |
| 93 | 11.34 | 33.15 | 5.47 | 268 | 150 | 9.56 | 33.76 | 3.28 | 26.08 | 194 | 0.44 |
| 115 | 10.29 | 33.29 | 4.77 | 241 | 200 | 9.10 | 34.06 | 2.49 | 26.39 | 165 | 0.53 |
| 142 | 9.62 | 33.62 | 3.59 | 205 | 250 | 8.30 | 34.14 | 2.04 | 26.57 | 147 | 0.61 |
| 187 | 9.28 | 34.03 | 2.55 | 170 | 300 | 7.95 | 34.20 | 1.45 | 26.67 | 138 | 0.68 |
| 232 | 8.44 | 34.08 | 2.30 | 154 | 400 | 7.28 | 34.29 | 0.75 | 26.84 | 122 | 0.82 |
| 277 | 8.11 | 34.17 | 1.69 | 142 | 500 | 6.24 | 34.33 | 0.44 | 27.01 | 105 | 0.94 |
| 375 | 7.51 | 34.28 | 0.89 | 126 | | | | | | | |
| 468 | 6.46 | 34.32 | 0.51 | 109 | | | | | | | |
| 572 | 5.82 | 34.34 | 0.37 | 100 | | | | | | | |

SIO

CCOFI 5207

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

105.70 SPENCER F. BAIRD; July 3, 1952; 1051 GCT; 29°29'N, 118°54'W; sounding, 1800 fm; wind, 340°, force 3; weather, overcast; sea, moderate; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.23 | 33.44 | 5.70 | 365 | 0 | 17.23 | 33.44 | 5.70 | 24.28 | 365 | 0.00 |
| 5 | 17.24 | 33.40 | 5.63 | 368 | 10 | 17.24 | 33.40 | 5.58 | 24.25 | 368 | 0.04 |
| 15 | 17.25 | 33.41 | 5.54 | 367 | 20 | 17.24 | 33.44 | 5.55 | 24.28 | 365 | 0.07 |
| 30 | - | 33.48 | 5.57 | | 30 | 17.23 | 33.48 | 5.57 | 24.31 | 362 | 0.11 |
| 45 | 16.78 | 33.48 | 5.70 | 352 | 50 | 15.87 | 33.42 | 5.80 | 24.58 | 336 | 0.18 |
| 60 | 15.37 | 33.33 | 5.90 | 332 | 75 | 15.18 | 33.40 | 5.89 | 24.72 | 323 | 0.26 |
| 75 | 15.18 | 33.40 | 5.89 | 323 | 100 | 13.69 | 33.28 | 5.79 | 24.94 | 302 | 0.34 |
| 94 | 14.14 | 33.31 | 5.86 | 309 | 150 | 10.00 | 33.38 | 4.60 | 25.71 | 229 | 0.48 |
| 119 | 12.25 | 33.24 | 5.45 | 278 | 200 | 8.80 | 33.76 | 3.51 | 26.20 | 183 | 0.58 |
| 148 | 10.06 | 33.37 | 4.66 | 231 | 250 | 8.08 | 33.99 | 2.90 | 26.49 | 155 | 0.67 |
| 197 | 8.85 | 33.74 | 3.54 | 185 | 300 | 7.58 | 34.09 | 2.31 | 26.64 | 141 | 0.74 |
| 246 | 8.12 | 33.97 | 2.96 | 157 | 400 | 6.71 | 34.18 | | 26.83 | 122 | 0.88 |
| 295 | 7.62 | 34.08 | 2.38 | 142 | 500 | 6.13 | 34.28 | 0.52 | 26.99 | 108 | 1.00 |
| 398 | 6.72 | 34.18 | - | 123 | 600 | 5.57 | 34.36 | 0.32 | 27.12 | 95 | 1.11 |
| 497 | 6.16 | 34.28 | 0.53 | 108 | | | | | | | |
| 602 | 5.55 | 34.36 | 0.31 | 95 | | | | | | | |

105.80 SPENCER F. BAIRD; July 3, 1952; 1613 GCT; 29°02'N, 119°30'W; sounding, 1900 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.52 | 33.50 | 5.64 | 367 | 0 | 17.52 | 33.50 | 5.64 | 24.26 | 367 | 0.00 |
| 10 | 17.50 | 33.48 | 5.78 | 368 | 10 | 17.50 | 33.48 | 5.78 | 24.25 | 368 | 0.04 |
| 20 | 17.51 | 33.48 | 5.48 | 368 | 20 | 17.51 | 33.48 | 5.48 | 24.25 | 368 | 0.07 |
| 35 | 17.42 | 33.46 | 6.41 | 368 | 30 | 17.45 | 33.47 | 6.34 | 24.25 | 368 | 0.11 |
| 50 | 15.81 | 33.29 | 6.10 | 345 | 50 | 15.81 | 33.29 | 6.10 | 24.50 | 345 | 0.18 |
| 65 | 15.31 | 33.34 | 5.54 | 330 | 75 | 15.16 | 33.36 | 5.77 | 24.69 | 326 | 0.27 |
| 79 | 15.12 | 33.36 | 5.88 | 325 | 100 | 14.19 | 33.28 | 6.42 | 24.84 | 312 | 0.35 |
| 99 | 14.32 | 33.28 | 6.42 | 314 | 150 | 10.66 | 33.26 | 5.20 | 25.50 | 249 | 0.49 |
| 123 | 12.36 | 33.22 | 5.76 | 281 | 200 | 9.28 | 33.75 | 3.88 | 26.12 | 191 | 0.60 |
| 153 | 10.50 | 33.27 | 5.11 | 245 | 250 | 8.21 | 33.96 | 3.31 | 26.45 | 159 | 0.69 |
| 200 | 9.28 | 33.75 | 3.88 | 191 | 300 | 7.53 | 34.04 | 2.30 | 26.61 | 144 | 0.77 |
| 247 | 8.28 | 33.95 | 3.38 | 161 | 400 | 6.73 | 34.14 | 1.25 | 26.80 | 126 | 0.91 |
| 296 | 7.57 | 34.03 | 2.37 | 145 | 500 | 6.08 | 34.28 | 0.66 | 27.00 | 107 | 1.03 |
| 397 | 6.76 | 34.14 | 1.28 | 126 | 600 | (5.64) | (34.34) | (0.34) | (27.10) | (97) | (1.14) |
| 494 | 6.10 | 34.27 | 0.68 | 108 | | | | | | | |
| 599 | 5.64 | 34.34 | 0.35 | 97 | | | | | | | |

105.80 SPENCER F. BAIRD; July 3, 1952; 1740 GCT;[a] 29°02'N, 119°30'W; sounding, 1900 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 05°.

| | | | | |
|---|---|---|---|---|
| 0 | 17.57 | 33.54 | 5.66 | 365 |
| 10 | 17.51 | 33.49 | 5.53 | 368 |
| 25 | 17.52 | 33.51 | 5.71 | 366 |
| 50 | 15.84 | 33.33 | 6.05 | 342 |
| 74 | 15.02 | 33.33 | 5.87 | 325 |
| 98 | 14.11 | 33.30 | 5.87 | 309 |
| 122 | 11.76 | 33.21 | 5.49 | 271 |
| 146 | 10.48 | 33.25 | 4.86 | 247 |
| 171 | 9.54 | 33.50 | 4.45 | 213 |
| 195 | 9.29 | 33.72 | 3.81 | 193 |
| 219 | 8.62 | 33.91 | 3.50 | 169 |
| 244 | 8.20 | 33.98 | 3.32 | 157 |
| 263 | 7.93 | 33.98 | 2.62 | 154 |
| 273 | 7.77 | 34.04 | 2.53 | 147 |
| 293 | 7.51 | 34.07 | 2.37 | 141 |

a) Bathythermograph calibration cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

SPENCER F. BAIRD; July 3, 1952; 2205 GCT; 28°49.5'N, 120°14.5'W; sounding, 1971 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 18°. 105.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.87 | 33.48 | 5.58 | 377 | 0 | 17.87 | 33.48 | 5.58 | 24.16 | 377 | 0.00 |
| 10 | 17.64 | 33.48 | 5.56 | 371 | 10 | 17.64 | 33.48 | 5.56 | 24.22 | 371 | 0.04 |
| 20 | 17.65 | 33.48 | 5.58 | 371 | 20 | 17.65 | 33.48 | 5.58 | 24.21 | 371 | 0.07 |
| 33 | – | 33.46 | 5.57 | | 30 | 17.58 | 33.47 | 5.57 | 24.22 | 371 | 0.11 |
| 48 | 16.90 | 33.44 | 5.55 | 357 | 50 | 16.50 | 33.43 | 5.59 | 24.45 | 349 | 0.18 |
| 62 | 15.46 | 33.37 | 5.81 | 331 | 75 | 15.15 | 33.39 | 5.90 | 24.72 | 323 | 0.27 |
| 76 | 15.12 | 33.39 | 5.91 | 323 | 100 | 14.00 | 33.33 | 5.79 | 24.92 | 304 | 0.35 |
| 95 | 14.45 | 33.34 | 5.85 | 313 | 150 | 10.86 | 33.31 | 4.92 | 25.51 | 249 | 0.49 |
| 117 | 12.62 | 33.29 | 5.57 | 281 | 200 | 9.26 | 33.84 | 3.68 | 26.19 | 184 | 0.60 |
| 144 | 11.02 | 33.30 | 5.07 | 252 | 250 | 8.56 | 34.05 | 2.98 | 26.46 | 157 | 0.68 |
| 188 | 9.58 | 33.72 | 3.94 | 197 | 300 | 7.92 | 34.09 | 2.15 | 26.59 | 145 | 0.76 |
| 234 | 8.68 | 34.02 | 3.18 | 161 | 400 | 6.68 | 34.16 | 1.24 | 26.82 | 124 | 0.90 |
| 254 | 8.52 | 34.06 | 2.91 | 156 | 500 | 5.94 | 34.24 | 0.72 | 26.98 | 108 | 1.02 |
| 378 | 6.84 | 34.14 | 1.39 | 127 | | | | | | | |
| 472 | 6.14 | 34.22 | 0.82 | 112 | | | | | | | |
| 574 | 5.38 | 34.30 | 0.45 | 97 | | | | | | | |

PAOLINA-T; July 9, 1952; 1705 GCT; 29°51'N, 115°52'W; sounding, 50 fm; wind, 310°, force 1; weather, overcast; sea, moderate; wire angle, 00°. 110.33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.79 | 33.71 | 6.49 | 253 | 0 | 12.79 | 33.71 | 6.49 | 25.46 | 253 | 0.00 |
| 10 | 11.84 | 33.66 | 5.29 | 240 | 10 | 11.84 | 33.66 | 5.29 | 25.60 | 240 | 0.02 |
| 20 | 10.48 | 33.86 | 3.02 | 202 | 20 | 10.48 | 33.86 | 3.02 | 26.00 | 202 | 0.05 |
| 31 | 10.08 | 33.98 | 2.01 | 186 | 30 | 10.08 | 33.98 | 2.01 | 26.16 | 186 | 0.07 |
| 50 | 9.96 | 33.92 | 1.69 | 189 | 50 | 9.96 | 33.92 | 1.69 | 26.14 | 189 | 0.10 |

PAOLINA-T; July 9, 1952; 1943 GCT; 29°47'N, 116°00'W; sounding, 550 fm; wind, 320°, force 1; weather, overcast; sea, moderate; wire angle, 05°. 110.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.83 | 33.61 | 6.75 | 281 | 0 | 13.83 | 33.61 | 6.75 | 25.17 | 281 | 0.00 |
| 10 | 13.35 | 33.61 | 6.73 | 271 | 10 | 13.35 | 33.61 | 6.73 | 25.27 | 271 | 0.03 |
| 20 | 13.23 | 33.62 | 6.70 | 268 | 20 | 13.23 | 33.62 | 6.70 | 25.30 | 268 | 0.05 |
| 35 | 12.02 | 33.54 | 5.10 | 252 | 30 | 13.10 | 33.59 | 5.71 | 25.30 | 268 | 0.08 |
| 50 | 10.63 | 33.53 | 4.08 | 228 | 50 | 10.63 | 33.53 | 4.08 | 25.72 | 228 | 0.13 |
| 65 | 10.58 | 33.73 | 3.36 | 213 | 75 | 10.40 | 33.77 | 3.07 | 25.94 | 207 | 0.19 |
| 79 | 10.16 | 33.78 | 3.00 | 202 | 100 | 9.64 | 33.92 | 2.57 | 26.19 | 184 | 0.24 |
| 98 | 9.67 | 33.91 | 2.62 | 185 | 150 | 9.26 | 34.08 | 2.28 | 26.38 | 166 | 0.32 |
| 121 | 9.57 | 33.98 | 2.36 | 178 | 200 | 9.59 | 34.32 | 1.49 | 26.51 | 153 | 0.41 |
| 149 | 9.28 | 34.07 | 2.29 | 167 | 250 | (9.33) | (34.38) | (0.83) | (26.60) | (145) | (0.48) |
| 194 | 9.44 | 34.28 | 1.59 | 154 | | | | | | | |
| 240 | 9.40 | 34.37 | 0.91 | 146 | | | | | | | |

PAOLINA-T; July 9, 1952; 2339 GCT; 29°37.5'N, 116°20.5'W; sounding, 1400 fm; wind, 330°, force 3; weather, cloudy; sea, rough; wire angle, 22°. 110.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.10 | 33.43 | 5.51 | 363 | 0 | 17.10 | 33.43 | 5.51 | 24.31 | 363 | 0.00 |
| 9 | 17.05 | 33.43 | 5.72 | 362 | 10 | 17.05 | 33.43 | 5.73 | 24.32 | 362 | 0.04 |
| 19 | 16.81 | 33.39 | 5.77 | 359 | 20 | 16.79 | 33.39 | 5.77 | 24.35 | 359 | 0.07 |
| 33 | 16.40 | 33.40 | 5.78 | 349 | 30 | 16.49 | 33.40 | 5.78 | 24.43 | 351 | 0.11 |
| 51 | 16.22 | 33.41 | 5.74 | 345 | 50 | 16.23 | 33.41 | 5.74 | 24.49 | 345 | 0.18 |
| 65 | 14.90 | 33.31 | 5.76 | 324 | 75 | 14.20 | 33.21 | 6.12 | 24.78 | 317 | 0.26 |
| 80 | 13.18 | 33.19 | 6.16 | 299 | 100 | 10.54 | 33.43 | 4.56 | 25.66 | 234 | 0.33 |
| 100 | 10.54 | 33.43 | 4.56 | 234 | 150 | 9.72 | 33.96 | 2.62 | 26.21 | 182 | 0.44 |
| 123 | 10.13 | 33.78 | 3.29 | 202 | 200 | 10.07 | 34.31 | 1.09 | 26.42 | 162 | 0.52 |
| 150 | 9.72 | 33.96 | 2.62 | 182 | 250 | 9.72 | 34.37 | 0.82 | 26.53 | 151 | 0.60 |
| 198 | 10.06 | 34.30 | 1.12 | 162 | 300 | 8.88 | 34.34 | 0.74 | 26.64 | 141 | 0.68 |
| 251 | 9.68 | 34.37 | 0.82 | 151 | 400 | 7.89 | 34.36 | 0.54 | 26.81 | 125 | 0.82 |
| 296 | 8.92 | 34.34 | 0.78 | 141 | 500 | 6.92 | 34.36 | 0.34 | 26.95 | 112 | 0.94 |
| 400 | 7.89 | 34.36 | 0.54 | 125 | 600 | 6.00 | 34.34 | 0.32 | 27.05 | 102 | 1.06 |
| 498 | 6.95 | 34.36 | 0.34 | 112 | | | | | | | |
| 602 | 5.97 | 34.34 | 0.32 | 101 | | | | | | | |

SIO

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5207

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| **110.50** | PAOLINA-T; July 10, 1952; 0620 GCT; 29°17'N, 117°01'W; sounding, 2050 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 08°. | | | | | | | | | | |
| 0 | 17.39 | 33.34 | 5.58 | 376 | 0 | 17.39 | 33.34 | 5.58 | 24.17 | 376 | 0.00 |
| 10 | 17.40 | 33.32 | 5.53 | 377 | 10 | 17.40 | 33.32 | 5.53 | 24.15 | 377 | 0.04 |
| 25 | 17.27 | 33.37 | 5.48 | 371 | 20 | 17.32 | 33.36 | 5.48 | 24.20 | 373 | 0.08 |
| 50 | 14.93 | 33.32 | 5.88 | 324 | 30 | 17.23 | 33.37 | 5.50 | 24.23 | 370 | 0.11 |
| 74 | 13.36 | 33.19 | 5.95 | 302 | 50 | 14.93 | 33.32 | 5.88 | 24.71 | 324 | 0.18 |
| 99 | 11.99 | 33.37 | 4.87 | 264 | 75 | 13.30 | 33.19 | 5.95 | 24.95 | 301 | 0.26 |
| 153 | 9.92 | 33.92 | 2.74 | 188 | 100 | 11.90 | 33.38 | 4.80 | 25.37 | 261 | 0.33 |
| 202 | 10.38 | 34.34 | 1.20 | 164 | 150 | 9.98 | 33.88 | 2.82 | 26.10 | 192 | 0.45 |
| 250 | 8.68 | 34.21 | 1.64 | 147 | 200 | 10.36 | 34.34 | 1.21 | 26.39 | 164 | 0.54 |
| 298 | 8.59 | 34.26 | 1.43 | 142 | 250 | 8.68 | 34.21 | 1.64 | 26.57 | 147 | 0.62 |
| 399 | 7.34 | 34.26 | 0.65 | 125 | 300 | 8.57 | 34.26 | 1.42 | 26.63 | 142 | 0.69 |
| 495 | 6.34 | 34.34 | 0.41 | 106 | 400 | 7.33 | 34.26 | 0.64 | 26.81 | 125 | 0.83 |
| 596 | 5.85 | 34.36 | 0.40 | 98 | 500 | 6.31 | 34.34 | 0.41 | 27.01 | 105 | 0.95 |
| 796 | 4.79 | 34.40 | 0.49 | 83 | 600 | 5.82 | 34.36 | 0.40 | 27.09 | 98 | 1.06 |
| 994 | 4.08 | 34.46 | - | 72 | 700 | 5.25 | 34.38 | 0.43 | 27.18 | 90 | 1.16 |
| 1198 | 3.56 | 34.51 | 0.80 | 63 | 800 | 4.76 | 34.40 | 0.50 | 27.25 | 83 | 1.26 |
| | | | | | 1000 | 4.06 | 34.46 | | 27.37 | 71 | 1.43 |
| **110.60** | PAOLINA-T; July 10, 1952; 1321 GCT; 28°57'N, 117°42.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 23°. | | | | | | | | | | |
| 0 | 17.06 | 33.39 | 6.49u | 365 | 0 | 17.06 | 33.39 | | 24.29 | 365 | 0.00 |
| 9 | 17.10 | 33.36 | 5.51 | 368 | 10 | 17.10 | 33.36 | 5.51 | 24.25 | 368 | 0.04 |
| 18 | 17.09 | 33.38 | 5.58 | 366 | 20 | 17.07 | 33.38 | 5.63 | 24.28 | 366 | 0.07 |
| 32 | 16.78 | 33.35 | 5.79 | 361 | 30 | 16.81 | 33.35 | 5.78 | 24.31 | 362 | 0.11 |
| 50 | 16.71 | 33.42 | 5.62 | 355 | 50 | 16.71 | 33.42 | 5.62 | 24.39 | 355 | 0.18 |
| 63 | 15.37 | 33.30 | 5.92 | 335 | 75 | 14.60 | 33.30 | 5.96 | 24.77 | 319 | 0.27 |
| 78 | 14.41 | 33.30 | 5.97 | 315 | 100 | 13.10 | 33.28 | 5.64 | 25.06 | 291 | 0.34 |
| 99 | 13.20 | 33.28 | 5.69 | 293 | 150 | 10.41 | 33.78 | 2.93 | 25.95 | 206 | 0.47 |
| 120 | 11.27 | 33.34 | 5.00 | 253 | 200 | 10.09 | 34.18 | 1.66 | 26.32 | 171 | 0.57 |
| 146 | 10.42 | 33.74 | 3.19 | 209 | 250 | 9.52 | 34.35 | 1.30 | 26.55 | 150 | 0.65 |
| 193 | 10.04 | 34.14 | 1.73 | 174 | 300 | 8.89 | 34.38 | 0.97 | 26.67 | 138 | 0.72 |
| 246 | 9.57 | 34.34 | 1.33 | 151 | 400 | 7.30 | 34.27 | 0.91 | 26.82 | 123 | 0.86 |
| 288 | 9.10 | 34.39 | 0.99 | 140 | 500 | 6.38 | 34.31 | 0.42 | 26.98 | 109 | 0.98 |
| 389 | 7.42 | 34.27 | 0.96 | 125 | 600 | (5.73) | (34.38) | (0.36) | (27.12) | (95) | (1.09) |
| 491 | 6.46 | 34.30 | 0.44 | 110 | | | | | | | |
| 596 | 5.76 | 34.38 | 0.37 | 96 | | | | | | | |
| **110.70** | PAOLINA-T; July 10, 1952; 1950 GCT; 28°33'N, 118°25'W; sounding, 2000 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 27°. | | | | | | | | | | |
| 0 | 18.27 | 33.48 | 5.47 | 386 | 0 | 18.27 | 33.48 | 5.47 | 24.06 | 386 | 0.00 |
| 9 | 18.00 | 33.50 | 5.57 | 378 | 10 | 17.99 | 33.50 | 5.57 | 24.15 | 378 | 0.04 |
| 23 | 17.73 | 33.49 | 5.56 | 373 | 20 | 17.80 | 33.49 | 5.56 | 24.19 | 374 | 0.08 |
| 44 | 17.07 | 33.44 | 5.83 | 361 | 30 | 17.15 | 33.48 | 5.64 | 24.33 | 360 | 0.11 |
| 67 | 15.50 | 33.35 | 5.81 | 334 | 50 | 17.00 | 33.41 | 5.82 | 24.32 | 362 | 0.19 |
| 88 | 15.27 | 33.46 | 5.27 | 321 | 75 | 15.42 | 33.38 | 5.70 | 24.65 | 330 | 0.27 |
| 135 | 11.16 | 33.24 | 4.08 | 259 | 100 | 14.91 | 33.42 | 4.79 | 24.79 | 316 | 0.35 |
| 174 | 9.76 | 33.61 | 4.13 | 208 | 150 | 10.54 | 33.30 | 4.09 | 25.55 | 244 | 0.49 |
| 215 | 9.19 | 33.93 | 3.32 | 176 | 200 | 9.38 | 33.83 | 3.88 | 26.16 | 186 | 0.60 |
| 228 | 9.03 | 34.09 | 2.54 | 162 | 250 | 8.80 | 34.12 | 2.26 | 26.48 | 156 | 0.69 |
| 336 | 7.89 | 34.16 | 1.32 | 140 | 300 | 8.28 | 34.15 | 1.69 | 26.59 | 146 | 0.77 |
| 416 | 6.88 | 34.23 | 0.79 | 121 | 400 | 7.01 | 34.21 | 0.86 | 26.82 | 124 | 0.91 |
| 500 | 6.47 | 34.27 | 0.54 | 113 | 500 | 6.47 | 34.27 | 0.54 | 26.94 | 113 | 1.04 |
| 668 | 5.32 | 34.33 | 0.39 | 94 | 600 | 5.75 | 34.31 | 0.41 | 27.06 | 101 | 1.15 |
| 839 | 4.66 | 34.48 | 0.32 | 76 | 700 | 5.20 | 34.35 | 0.38 | 27.16 | 92 | 1.25 |
| 1031 | 3.92 | 34.49 | 0.52 | 68 | 800 | 4.80 | 34.45 | 0.33 | 27.28 | 80 | 1.35 |
| | | | | | 1000 | 4.07 | 34.49 | 0.50 | 27.40 | 69 | 1.51 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| PAOLINA-T; July 11, 1952; 0138, 0154 GCT; 28°14.5'N, 119°01'W; sounding, 1150 fm; wind, 330°, force 2; weather, partly cloudy; sea, rough; wire angle, 19°, 18°. | | | | | | | | | | | 110.80 |
| 0 | 18.60 | 33.51 | 5.43 | 391 | 0 | 18.60 | 33.51 | 5.43 | 24.00 | 391 | 0.00 |
| | | | | | 10 | 18.56 | 33.55 | 5.54 | 24.05 | 388 | 0.04 |
| 10 | 18.56 | 33.55 | 5.54 | 388 | 20 | 18.20 | 33.50 | 5.40 | 24.10 | 383 | 0.08 |
| 19 | 18.23 | 33.50 | 5.39 | 383 | 30 | 18.03 | 33.58 | 5.48 | 24.20 | 373 | 0.12 |
| 33 | 18.01 | 33.59 | 5.54 | 372 | 50 | 15.98 | 33.42 | 5.80 | 24.56 | 339 | 0.19 |
| 52 | 15.94 | 33.41 | 5.81 | 339 | 75 | 15.10 | 33.37 | 5.77 | 24.72 | 324 | 0.27 |
| 65 | 15.48 | 33.38 | 5.82 | 331 | 100 | 13.90 | 33.29 | 5.76 | 24.91 | 305 | 0.35 |
| 79 | 15.01 | 33.37 | 5.76 | 322 | 150 | 10.68 | 33.49 | 4.60 | 25.68 | 232 | 0.49 |
| 103 | 13.63 | 33.28 | 5.76 | 301 | 200 | 9.67 | 33.86 | 3.63 | 26.14 | 188 | 0.59 |
| 126 | 11.48 | 33.40 | 5.05 | 252 | 250 | 8.71 | 34.06 | 2.83 | 26.45 | 159 | 0.68 |
| 152 | 10.59 | 33.50 | 4.54 | 230 | 300 | 8.72 | 34.27 | 1.61 | 26.61 | 144 | 0.76 |
| 204 | 9.59 | 33.89 | 3.54 | 185 | 400 | 7.47 | 34.29 | 0.79 | 26.81 | 124 | 0.90 |
| 260 | 8.68 | 34.10 | 2.70 | 156 | 500 | 6.52 | 34.33 | 0.42 | 26.98 | 109 | 1.02 |
| 307 | 8.72 | 34.28 | 1.49 | 143 | 600 | 5.80 | 34.36 | 0.37 | 27.09 | 98 | 1.13 |
| 415 | 7.27 | 34.29 | 0.71 | 122 | | | | | | | |
| 521 | 6.37 | 34.34 | 0.39 | 106 | | | | | | | |
| 628 | 5.62 | 34.37 | 0.36 | 95 | | | | | | | |
| PAOLINA-T; July 11, 1952; 0715 GCT; 27°56'N, 119°36'W; sounding, 2100 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 08°. | | | | | | | | | | | 110.90 |
| 0 | 18.83 | 33.58 | 5.44 | 392 | 0 | 18.83 | 33.58 | 5.44 | 24.00 | 392 | 0.00 |
| 10 | 18.85 | 33.59 | 5.96 | 392 | 10 | 18.85 | 33.59 | 5.96 | 24.00 | 392 | 0.04 |
| 25 | 18.36 | 33.59 | 5.50 | 380 | 20 | 18.46 | 33.59 | 5.53 | 24.10 | 382 | 0.08 |
| 50 | 17.12 | 33.58 | 5.71 | 352 | 30 | 18.14 | 33.59 | 5.53 | 24.18 | 375 | 0.12 |
| 73 | 15.95 | 33.54 | 5.75 | 329 | 50 | 17.12 | 33.58 | 5.71 | 24.42 | 352 | 0.19 |
| 99 | 15.23 | 33.56 | 5.68 | 313 | 75 | 15.90 | 33.54 | 5.75 | 24.67 | 328 | 0.27 |
| 152 | 11.47 | 33.71 | 3.79 | 229 | 100 | 15.21 | 33.56 | 5.67 | 24.84 | 312 | 0.36 |
| 199 | 10.25 | 33.96 | 3.10 | 190 | 150 | 11.57 | 33.70 | 3.88 | 25.68 | 232 | 0.49 |
| 248 | 9.11 | 34.09 | 2.56 | 163 | 200 | 10.22 | 33.97 | 3.09 | 26.13 | 189 | 0.60 |
| 295 | 8.95 | 34.14 | 2.45 | 157 | 250 | 9.10 | 34.09 | 2.54 | 26.41 | 163 | 0.69 |
| 399 | 7.58 | 34.33 | 0.89 | 123 | 300 | 8.91 | 34.15 | 2.43 | 26.49 | 155 | 0.77 |
| 495 | 6.46 | 34.30 | 0.60 | 110 | 400 | 7.54 | 34.33 | 0.89 | 26.84 | 122 | 0.92 |
| 598 | 5.63 | 34.34 | 0.47 | 97 | 500 | 6.41 | 34.30 | 0.59 | 26.97 | 110 | 1.04 |
| 799 | 4.80 | 34.44 | 0.44 | 81 | 600 | 5.62 | 34.34 | 0.47 | 27.10 | 97 | 1.15 |
| 996 | 4.09 | 34.48 | 0.62 | 70 | 700 | 5.16 | 34.40 | 0.46 | 27.20 | 87 | 1.25 |
| 1199 | 3.49 | 34.54 | 0.92 | 60 | 800 | 4.79 | 34.44 | 0.44 | 27.28 | 80 | 1.34 |
| | | | | | 1000 | 4.07 | 34.48 | 0.63 | 27.39 | 70 | 1.51 |
| PAOLINA-T; July 13, 1952; 0251 GCT; 29°15.5'N, 115°10'W; sounding, 44 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 12°. | | | | | | | | | | | 113.30 |
| 0 | 14.16 | 33.71 | 6.54 | 280 | 0 | 14.16 | 33.71 | 6.54 | 25.18 | 280 | 0.00 |
| 10 | 12.48 | 33.70 | 5.88 | 248 | 10 | 12.48 | 33.70 | 5.88 | 25.51 | 248 | 0.03 |
| 20 | 9.91 | 33.78 | 2.71 | 198 | 20 | 9.91 | 33.78 | 2.71 | 26.04 | 198 | 0.05 |
| 24 | 9.80 | 33.82 | 2.60 | 193 | | | | | | | |
| 29 | 9.64 | 33.84 | 2.85 | 189 | | | | | | | |
| PAOLINA-T; July 12, 1952; 1624 GCT; 28°46'N, 116°15'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 14°. | | | | | | | | | | | 113.40 |
| 0 | 17.45 | 33.28 | 5.65 | 381 | 0 | 17.45 | 33.28 | 5.65 | 24.11 | 381 | 0.00 |
| 10 | 17.44 | 33.28 | 5.57 | 381 | 10 | 17.44 | 33.28 | 5.57 | 24.11 | 381 | 0.04 |
| 19 | 17.40 | 33.28 | 5.76 | 380 | 20 | 17.39 | 33.28 | 5.79 | 24.12 | 380 | 0.08 |
| 34 | 16.03 | 33.22 | 6.10 | 354 | 30 | 16.74 | 33.23 | 6.06 | 24.24 | 369 | 0.11 |
| 48 | 14.56 | 33.19 | 6.09 | 326 | 50 | 14.38 | 33.19 | 6.10 | 24.73 | 322 | 0.18 |
| 64 | - | 33.14 | 6.33 | | 75 | 12.70 | 33.11 | 6.23 | 25.01 | 296 | 0.26 |
| 78 | 12.47 | 33.11 | 6.15 | 292 | 100 | 10.80 | 33.35 | 4.62 | 25.55 | 245 | 0.33 |
| 98 | 10.95 | 33.28 | 4.86 | 252 | 150 | 10.09 | 34.05 | 2.60 | 26.22 | 181 | 0.44 |
| 121 | 10.18 | 33.76 | 3.41 | 204 | 200 | 9.36 | 34.19 | 2.12 | 26.45 | 159 | 0.52 |
| 150 | 10.09 | 34.05 | 2.60 | 181 | 250 | 9.69 | 34.43 | 0.71 | 26.58 | 147 | 0.60 |
| 200 | 9.36 | 34.19 | 2.12 | 159 | 300 | 9.40 | 34.44 | 0.42 | 26.64 | 141 | 0.68 |
| 247 | 9.70 | 34.42 | 0.76 | 147 | 400 | 7.99 | 34.42 | 0.37 | 26.84 | 122 | 0.81 |
| 266 | 9.64 | 34.44 | 0.55 | 145 | 500 | 6.69 | 34.34 | 0.39 | 26.96 | 110 | 0.94 |
| 396 | 8.09 | 34.42 | 0.37 | 123 | 600 | (6.04) | (34.40) | (0.23) | (27.10) | (98) | (1.05) |
| 492 | 6.78 | 34.34 | 0.40 | 111 | | | | | | | |
| 596 | 6.09 | 34.40 | 0.26 | 98 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

113.50 PAOLINA-T; July 12, 1952; 0910 GCT; 28°32'N, 116°45.5'W; sounding, 2150 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.41 | 33.33 | | 377 | 0 | 17.41 | 33.33 | | 24.16 | 377 | 0.00 |
| 9 | 17.42 | 33.33 | | 377 | 10 | 17.42 | 33.33 | | 24.16 | 377 | 0.04 |
| 19 | 17.16 | 33.33 | | 371 | 20 | 17.10 | 33.33 | | 24.23 | 370 | 0.08 |
| 34 | 14.13 | 33.24 | | 314 | 30 | 15.50 | 33.25 | | 24.54 | 341 | 0.11 |
| 53 | 11.99 | 33.35 | | 265 | 50 | 12.21 | 33.33 | | 25.27 | 271 | 0.17 |
| 69 | - | 33.39 | | | 75 | 10.30 | 33.48 | | 25.74 | 227 | 0.23 |
| 82 | 10.27 | 33.67 | | 212 | 100 | 10.32 | 33.93 | | 26.08 | 194 | 0.29 |
| 107 | 10.36 | 33.99 | | 190 | 150 | 10.60 | 34.36 | | 26.37 | 167 | 0.38 |
| 130 | 10.48 | 34.26 | | 172 | 200 | 10.42 | 34.43 | | 26.45 | 158 | 0.46 |
| 158 | 10.64 | 34.38 | | 166 | 250 | 10.09 | 34.47 | | 26.54 | 150 | 0.54 |
| 208 | 10.32 | 34.43 | | 157 | 300 | 9.68 | 34.43 | | 26.58 | 146 | 0.62 |
| 263 | 10.02 | 34.47 | | 149 | 400 | 8.31 | 34.38 | | 26.76 | 129 | 0.76 |
| 309 | 9.53 | 34.42 | | 145 | 500 | 7.22 | 34.35 | | 26.90 | 116 | 0.89 |
| 416 | 8.13 | 34.37 | | 127 | 600 | 6.28 | 34.34 | | 27.02 | 105 | 1.01 |
| 522 | 7.00 | 34.34 | | 114 | | | | | | | |
| 631 | 6.01 | 34.34 | | 102 | | | | | | | |

113.60 PAOLINA-T; July 12, 1952; 0226 GCT; 28°19.5'N, 117°16.5'W; sounding, 2200 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.39 | 33.50 | 5.52 | 387 | 0 | 18.39 | 33.50 | 5.52 | 24.05 | 387 | 0.00 |
| 9 | 18.41 | 33.49 | 5.39 | 388 | 10 | 18.40 | 33.49 | 5.39 | 24.04 | 388 | 0.04 |
| 18 | 17.74 | 33.48 | 5.55 | 374 | 20 | 17.74 | 33.48 | 6.15 | 24.19 | 374 | 0.08 |
| 31 | 13.91 | 33.40 | 6.37 | 298 | 30 | 15.00 | 33.40 | 6.35 | 24.76 | 320 | 0.11 |
| 48 | 11.48 | 33.47 | 4.58 | 247 | 50 | 11.39 | 33.48 | 4.10 | 25.54 | 245 | 0.17 |
| 62 | 11.04 | - | - | | 75 | 10.34 | 33.73 | 2.91 | 25.92 | 209 | 0.23 |
| 75 | 10.34 | 33.73 | 2.91 | 209 | 100 | 9.82 | 33.84 | 2.98 | 26.10 | 192 | 0.28 |
| 97 | 9.90 | 33.83 | 2.99 | 194 | 150 | 9.43 | 34.14 | 1.90 | 26.40 | 164 | 0.37 |
| 119 | 9.18 | 33.96 | 2.84 | 173 | 200 | 8.28 | 34.15 | 2.12 | 26.59 | 146 | 0.45 |
| 146 | 9.44 | 34.14 | 1.85 | 164 | 250 | 8.48 | 34.34 | 0.72 | 26.70 | 135 | 0.52 |
| 194 | 8.32 | 34.14 | 2.16 | 147 | 300 | 8.28 | 34.37 | 0.63 | 26.76 | 130 | 0.59 |
| 247 | 8.49 | 34.34 | 0.74 | 135 | 400 | 7.32 | 34.40 | 0.38 | 26.92 | 114 | 0.71 |
| 292 | 8.33 | 34.37 | 0.65 | 130 | 500 | 6.28 | 34.38 | 0.34 | 27.05 | 102 | 0.83 |
| 396 | 7.40 | 34.40 | 0.39 | 115 | 600 | 5.79 | 34.42 | 0.35 | 27.14 | 93 | 0.93 |
| 499 | 6.29 | 34.38 | 0.34 | 102 | | | | | | | |
| 606 | 5.76 | 34.42 | 0.35 | 93 | | | | | | | |

113.70 PAOLINA-T; July 11, 1952; 1950 GCT; 27°55.5'N, 118°03'W; sounding, 2050 fm; wind, 340°, force 2; weather, partly cloudy; sea, rough; wire angle, 35°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.09 | 33.40 | 5.72 | 387 | 0 | 18.09 | 33.40 | 5.72 | 24.05 | 387 | 0.00 |
| 8 | 17.76 | 33.39 | 5.65 | 381 | 10 | 17.75 | 33.39 | 5.65 | 24.12 | 380 | 0.04 |
| 15 | 17.69 | 33.38 | 5.65 | 380 | 20 | 17.53 | 33.37 | 5.65 | 24.16 | 377 | 0.08 |
| 28 | 17.18 | 33.35 | 5.64 | 370 | 30 | 17.10 | 33.35 | 5.66 | 24.25 | 368 | 0.11 |
| 40 | 16.93 | 33.35 | 5.72 | 365 | 50 | 16.03 | 33.33 | 5.89 | 24.48 | 346 | 0.19 |
| 52 | 15.84 | 33.33 | 5.90 | 342 | 75 | 12.90 | 33.28 | 5.85 | 25.10 | 287 | 0.26 |
| 63 | 14.40 | 33.31 | 6.22 | 314 | 100 | 11.24 | 33.47 | 4.59 | 25.56 | 243 | 0.33 |
| 75 | 12.86 | 33.28 | 5.85 | 286 | 150 | 9.60 | 33.81 | 3.60 | 26.11 | 191 | 0.44 |
| 92 | 12.13 | 33.40 | 5.05 | 264 | 200 | 9.69 | 34.24 | 1.74 | 26.43 | 161 | 0.53 |
| 110 | 11.12 | 33.51 | 4.08 | 238 | 250 | 9.11 | 34.29 | 1.23 | 26.57 | 148 | 0.61 |
| 142 | 9.74 | 33.74 | 3.72 | 198 | 300 | 8.61 | 34.34 | 0.82 | 26.68 | 137 | 0.68 |
| 175 | 9.76 | 34.05 | 2.41 | 176 | 400 | 7.58 | 34.40 | 0.40 | 26.89 | 118 | 0.82 |
| 207 | 9.59 | 34.25 | 1.62 | 158 | | | | | | | |
| 273 | 8.88 | 34.31 | 1.07 | 143 | | | | | | | |
| 341 | 8.24 | 34.38 | 0.56 | 128 | | | | | | | |
| 428 | 7.28 | 34.41 | 0.32 | 113 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| PAOLINA-T; July 13, 1952; 0702 GCT; 28°56'N, 114°41.5'W; sounding, 37 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | | 117.26 |
| 0 | 14.84 | 33.60 | 7.19 | 302 | 0 | 14.84 | 33.60 | 7.19 | 24.95 | 302 | 0.00 |
| 9 | 11.34 | 33.62 | 5.02 | 234 | 10 | 11.20 | 33.62 | 4.80 | 25.69 | 231 | 0.03 |
| 20 | 10.25 | 33.71 | 3.38 | 209 | 20 | 10.25 | 33.71 | 3.38 | 25.92 | 209 | 0.05 |
| 30 | 9.92 | 33.82 | 2.08 | 195 | 30 | 9.92 | 33.82 | 2.08 | 26.07 | 195 | 0.07 |
| PAOLINA-T; July 13, 1952; 1000 GCT; 28°47'N, 114°56'W; sounding, 50 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 08°. | | | | | | | | | | | 117.30 |
| 0 | 13.48 | 33.56 | 6.55 | 277 | 0 | 13.48 | 33.56 | 6.55 | 25.20 | 277 | 0.00 |
| 10 | 13.50 | 33.56 | 6.42 | 278 | 10 | 13.50 | 33.56 | 6.42 | 25.20 | 278 | 0.03 |
| 20 | 13.17 | 33.57 | 6.24 | 271 | 20 | 13.17 | 33.57 | 6.24 | 25.27 | 271 | 0.06 |
| 30 | 12.52 | 33.60 | 5.47 | 256 | 30 | 12.52 | 33.60 | 5.47 | 25.42 | 256 | 0.08 |
| 51 | 11.18 | 33.64 | 4.37 | 230 | 50 | 11.22 | 33.64 | 4.40 | 25.70 | 230 | 0.13 |
| PAOLINA-T; July 13, 1952; 1639 GCT; 28°29'N, 115°37.5'W; sounding, 550 fm; wind, 330°, force 3; weather, fog; sea, rough; wire angle, 15°. | | | | | | | | | | | 117.40 |
| 0 | 15.03 | 33.31 | 6.21 | 327 | 0 | 15.03 | 33.31 | 6.21 | 24.68 | 327 | 0.00 |
| 10 | 14.72 | 33.31 | 6.33 | 320 | 10 | 14.72 | 33.31 | 6.33 | 24.75 | 320 | 0.03 |
| 19 | 13.47 | 33.28 | 6.03 | 298 | 20 | 13.31 | 33.28 | 5.99 | 25.02 | 295 | 0.06 |
| 35 | 12.15 | 33.32 | 5.55 | 270 | 30 | 12.50 | 33.30 | 5.70 | 25.20 | 278 | 0.09 |
| 53 | 10.46 | 33.40 | 4.40 | 235 | 50 | 10.50 | 33.38 | 4.70 | 25.62 | 237 | 0.14 |
| 69 | - | 33.56 | 3.92 | | 75 | 10.39 | 33.67 | 3.65 | 25.87 | 214 | 0.20 |
| 82 | 10.38 | 33.78 | 3.15 | 206 | 100 | 10.19 | 33.89 | 2.74 | 26.07 | 195 | 0.25 |
| 107 | 10.06 | 33.93 | 2.59 | 190 | 150 | 10.58 | 34.34 | 1.19 | 26.36 | 168 | 0.34 |
| 130 | 10.91 | 34.28 | 1.18 | 178 | 200 | 10.47 | 34.44 | 1.06 | 26.45 | 159 | 0.43 |
| 158 | 10.44 | 34.36 | 1.20 | 164 | 250 | 10.03 | 34.45 | 0.76 | 26.54 | 151 | 0.51 |
| 212 | 10.26 | 34.45 | 0.99 | 154 | 300 | 9.61 | 34.45 | 0.52 | 26.61 | 144 | 0.58 |
| 268 | 9.92 | 34.45 | 0.67 | 149 | 400 | 8.34 | 34.39 | 0.45 | 26.76 | 129 | 0.73 |
| 317 | 9.40 | 34.44 | 0.49 | 141 | 500 | 7.29 | 34.36 | 0.40 | 26.90 | 117 | 0.86 |
| 428 | 8.02 | 34.37 | 0.44 | 126 | 600 | 6.29 | 34.37 | 0.30 | 27.04 | 103 | 0.97 |
| 537 | 6.90 | 34.36 | 0.35 | 111 | | | | | | | |
| 647 | 5.88 | 34.37 | 0.29 | 98 | | | | | | | |
| PAOLINA-T; July 13, 1952; 2329 GCT; 28°08.5'N, 116°18'W; sounding, 2150 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°. | | | | | | | | | | | 117.50 |
| 0 | 18.42 | 33.44 | 5.58 | 392 | 0 | 18.42 | 33.44 | 5.58 | 24.00 | 392 | 0.00 |
| 10 | 18.40 | 33.44 | 5.64 | 392 | 10 | 18.40 | 33.44 | 5.64 | 24.00 | 392 | 0.04 |
| 19 | 17.45 | 33.42 | 5.86 | 371 | 20 | 17.80 | 33.42 | 5.89 | 24.13 | 379 | 0.08 |
| 34 | 14.66 | 33.39 | 6.43 | 313 | 30 | 15.20 | 33.40 | 6.40 | 24.72 | 324 | 0.11 |
| 53 | 12.15 | 33.39 | 5.05 | 265 | 50 | 12.41 | 33.39 | 5.33 | 25.28 | 270 | 0.17 |
| 67 | - | 33.40 | 4.69 | | 75 | 11.00 | 33.44 | 4.00 | 25.58 | 241 | 0.24 |
| 81 | 10.74 | 33.58 | 3.73 | 227 | 100 | 9.84 | 33.69 | 3.57 | 25.98 | 204 | 0.29 |
| 104 | 9.82 | 33.71 | 3.52 | 202 | 150 | 9.73 | 34.11 | 2.36 | 26.32 | 171 | 0.39 |
| 126 | 10.02 | 34.01 | 2.69 | 183 | 200 | 8.82 | 34.14 | 2.26 | 26.49 | 155 | 0.47 |
| 153 | 9.65 | 34.11 | 2.35 | 170 | 250 | 8.67 | 34.26 | 1.05 | 26.61 | 144 | 0.55 |
| 202 | 8.78 | 34.14 | 2.25 | 154 | 300 | 8.66 | 34.39 | 0.65 | 26.71 | 134 | 0.62 |
| 257 | 8.72 | 34.28 | 0.96 | 143 | 400 | 7.94 | 34.43 | 0.38 | 26.86 | 120 | 0.75 |
| 302 | 8.64 | 34.39 | 0.64 | 133 | 500 | 6.92 | 34.41 | 0.33 | 26.99 | 108 | 0.87 |
| 409 | 7.84 | 34.43 | 0.37 | 119 | 600 | 6.06 | 34.38 | 0.26 | 27.08 | 99 | 0.99 |
| 515 | 6.78 | 34.40 | 0.32 | 107 | | | | | | | |
| 623 | 5.89 | 34.38 | 0.23 | 97 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **117.60** | PAOLINA-T; July 14, 1952; 0653 GCT; 27°48'N, 116°58.5'W; sounding, 2150 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 18.38 | 33.44 | 5.49 | 391 | 0 | 18.38 | 33.44 | 5.49 | 24.01 | 391 | 0.00 |
| 10 | 18.40 | 33.48 | 5.45 | 389 | 10 | 18.40 | 33.48 | 5.45 | 24.03 | 389 | 0.04 |
| 20 | 16.78 | 33.41 | 5.79 | 357 | 20 | 16.78 | 33.41 | 5.79 | 24.37 | 357 | 0.08 |
| 35 | 13.91 | 33.36 | 6.21 | 300 | 30 | 14.70 | 33.37 | 6.16 | 24.80 | 316 | 0.11 |
| 53 | 11.91 | 33.43 | 4.92 | 258 | 50 | 12.40 | 33.41 | 5.45 | 25.30 | 268 | 0.17 |
| 69 | - | 33.49 | 4.15 | | 75 | 10.76 | 33.52 | 3.90 | 25.69 | 231 | 0.23 |
| 84 | 10.41 | 33.63 | 3.51 | 217 | 100 | 9.82 | 33.78 | 3.13 | 26.05 | 197 | 0.29 |
| 107 | 9.76 | 33.84 | 3.00 | 191 | 150 | 9.77 | 34.18 | 1.78 | 26.37 | 166 | 0.38 |
| 131 | 9.73 | 34.07 | 2.43 | 174 | 200 | 9.09 | 34.27 | 1.32 | 26.55 | 149 | 0.46 |
| 159 | 9.79 | 34.21 | 1.61 | 164 | 250 | 7.92 | 34.21 | 1.28 | 26.69 | 136 | 0.53 |
| 211 | 8.85 | 34.27 | 1.29 | 145 | 300 | 7.42 | 34.23 | 1.01 | 26.77 | 128 | 0.60 |
| 262 | 7.75 | 34.20 | 1.27 | 135 | 400 | 7.04 | 34.32 | 0.41 | 26.90 | 116 | 0.73 |
| 315 | 7.36 | 34.24 | 0.89 | 126 | 500 | 6.51 | 34.40 | 0.31 | 27.03 | 103 | 0.84 |
| 424 | 6.96 | 34.34 | 0.37 | 114 | 600 | 5.78 | 34.43 | 0.28 | 27.15 | 92 | 0.95 |
| 532 | 6.26 | 34.42 | 0.30 | 99 | | | | | | | |
| 641 | 5.50 | 34.43 | 0.27 | 89 | | | | | | | |
| **117.70** | PAOLINA-T; July 14, 1952; 1330 GCT; 27°28'N, 117°39'W; sounding, 2200 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 32°. | | | | | | | | | | |
| 0 | 18.20 | 33.46 | 5.45 | 386 | 0 | 18.20 | 33.46 | 5.45 | 24.07 | 386 | 0.00 |
| 9 | 18.22 | 33.48 | 5.67 | 385 | 10 | 18.21 | 33.48 | 5.65 | 24.08 | 384 | 0.04 |
| 17 | 18.17 | 33.46 | 5.56 | 385 | 20 | 18.15 | 33.44 | 5.60 | 24.06 | 386 | 0.08 |
| 30 | 16.24 | 33.39 | 6.06 | 347 | 30 | 16.24 | 33.39 | 6.06 | 24.48 | 347 | 0.11 |
| 47 | 14.33 | 33.48 | 6.29 | 300 | 50 | 14.05 | 33.49 | 6.27 | 25.03 | 294 | 0.18 |
| 60 | - | 33.51 | 5.55 | | 75 | 11.75 | 33.58 | 4.18 | 25.55 | 244 | 0.25 |
| 72 | 11.94 | 33.57 | 4.30 | 248 | 100 | 10.26 | 33.75 | 3.50 | 25.95 | 206 | 0.30 |
| 90 | 10.75 | 33.65 | 3.74 | 222 | 150 | 10.00 | 34.12 | 2.05 | 26.29 | 174 | 0.40 |
| 108 | 10.36 | 33.81 | 3.37 | 203 | 200 | 9.28 | 34.25 | 1.54 | 26.51 | 153 | 0.48 |
| 127 | 10.20 | 34.01 | 2.55 | 186 | 250 | 9.72 | 34.42 | 0.56 | 26.57 | 148 | 0.56 |
| 165 | 10.04 | 34.22 | 1.81 | 168 | 300 | 8.40 | 34.27 | 1.00 | 26.66 | 139 | 0.63 |
| 207 | 9.66 | 34.33 | 1.49 | 154 | 400 | 7.23 | 34.32 | 0.68 | 26.87 | 119 | 0.77 |
| 243 | 9.74 | 34.42 | 0.54 | 148 | 500 | 6.24 | 34.33 | 0.38 | 27.01 | 105 | 0.89 |
| 331 | 7.68 | 34.20 | 1.17 | 134 | | | | | | | |
| 420 | 7.08 | 34.34 | 0.55 | 115 | | | | | | | |
| 516 | 6.11 | 34.33 | 0.34 | 104 | | | | | | | |
| **120.25** | PAOLINA-T; July 16, 1952; 2200 GCT; 28°19.5'N, 114°20'W; sounding, 48 fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 0 | 15.25 | 33.57 | 6.28 | 312 | 0 | 15.25 | 33.57 | 6.28 | 24.84 | 312 | 0.00 |
| 10 | 15.08 | 33.57 | 6.24 | 309 | 10 | 15.08 | 33.57 | 6.24 | 24.87 | 309 | 0.03 |
| 20 | 14.55 | 33.58 | 6.28 | 297 | 20 | 14.55 | 33.58 | 6.28 | 24.99 | 297 | 0.06 |
| 30 | 12.64 | 33.58 | 5.01 | 260 | 30 | 12.64 | 33.58 | 5.01 | 25.38 | 260 | 0.09 |
| **120.30** | PAOLINA-T; July 16, 1952; 1905 GCT; 28°11.5'N, 114°37'W; sounding, 50 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 06°. | | | | | | | | | | |
| 0 | 17.08 | 33.58 | 5.70 | 351 | 0 | 17.08 | 33.58 | 5.70 | 24.43 | 351 | 0.00 |
| 10 | 17.06 | 33.53 | 5.73 | 354 | 10 | 17.06 | 33.53 | 5.73 | 24.39 | 354 | 0.04 |
| 20 | 16.99 | 33.53 | 5.76 | 353 | 20 | 16.99 | 33.53 | 5.76 | 24.41 | 353 | 0.07 |
| 30 | 17.01 | 33.56 | 5.80 | 351 | 30 | 17.01 | 33.56 | 5.80 | 24.43 | 351 | 0.11 |
| 50 | 16.81 | 33.56 | 5.58 | 347 | 50 | 16.81 | 33.56 | 5.58 | 24.47 | 347 | 0.18 |
| **120.35** | PAOLINA-T; July 16, 1952; 1605 GCT; 28°03'N, 114°54'W; sounding, 40 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 16.24 | 33.57 | 6.02 | 333 | 0 | 16.24 | 33.57 | 6.02 | 24.61 | 333 | 0.00 |
| 9 | 16.17 | 33.58 | 6.01 | 331 | 10 | 16.15 | 33.58 | 6.00 | 24.64 | 331 | 0.03 |
| 19 | 16.09 | 33.58 | 5.99 | 329 | 20 | 16.08 | 33.58 | 5.99 | 24.66 | 329 | 0.07 |
| 29 | 16.08 | 33.58 | 5.99 | 329 | 30 | 16.08 | 33.58 | 5.99 | 24.66 | 329 | 0.10 |
| 49 | 11.21 | 33.60 | 3.61 | 233 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

PAOLINA-T; July 16, 1952; 1020 GCT; 27°43'N, 115°22.5'W; sounding, 380 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 14°. 120.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.59 | 33.82 | 6.14 | 260 | 0 | 13.59 | 33.82 | 6.14 | 25.38 | 260 | 0.00 |
| 10 | 13.56 | 33.94 | 5.94 | 251 | 10 | 13.56 | 33.94 | 5.94 | 25.48 | 251 | 0.03 |
| 25 | 12.54 | 33.68 | 4.50 | 251 | 20 | 13.54 | 33.92 | 5.25 | 25.47 | 252 | 0.05 |
| 49 | - | 33.96 | 1.94 | | 30 | 11.75 | 33.71 | 3.95 | 25.65 | 234 | 0.08 |
| 73 | 11.64 | 34.40 | 0.65 | 182 | 50 | 11.30 | 34.02 | 1.85 | 25.98 | 204 | 0.12 |
| 97 | 11.63 | 34.42 | 0.62 | 180 | 75 | 11.64 | 34.40 | 0.64 | 26.21 | 182 | 0.17 |
| 150 | 11.59 | 34.52 | 0.48 | 172 | 100 | 11.63 | 34.42 | 0.62 | 26.23 | 180 | 0.21 |
| 199 | 11.24 | 34.56 | 0.41 | 163 | 150 | 11.59 | 34.52 | 0.48 | 26.31 | 172 | 0.30 |
| 246 | 10.84 | 34.57 | 0.27 | 155 | 200 | 11.23 | 34.56 | 0.40 | 26.41 | 163 | 0.39 |
| 295 | 10.22 | 34.57 | 0.24 | 145 | 250 | 10.80 | 34.57 | 0.26 | 26.50 | 154 | 0.47 |
| 350 | 9.68 | 34.53 | 0.29 | 139 | 300 | 10.17 | 34.57 | 0.25 | 26.61 | 144 | 0.55 |
| 398 | 9.20 | 34.54 | 0.25 | 131 | 400 | 9.17 | 34.54 | 0.25 | 26.75 | 130 | 0.69 |
| 448 | 8.38 | 34.47 | 0.29 | 124 | 500 | (7.49) | (34.42) | (0.22) | (26.91) | (115) | (0.82) |
| 499 | 7.50 | 34.42 | 0.23 | 115 | | | | | | | |

PAOLINA-T; July 16, 1952; 0559, 0623 GCT; 27°34'N, 115°41.5'W; sounding, 2100 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 35°, 47°. 120.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.59 | 33.35 | 5.83 | 357 | 0 | 16.59 | 33.35 | 5.83 | 24.37 | 357 | 0.00 |
| 8 | 16.62 | 33.33 | 5.87 | 359 | 10 | 16.61 | 33.33 | 5.89 | 24.35 | 359 | 0.04 |
| 16 | 16.52 | 33.35 | 5.99 | 356 | 20 | 16.50 | 33.34 | 5.98 | 24.38 | 356 | 0.07 |
| 28 | 15.19 | 33.32 | 5.92 | 329 | 30 | 15.10 | 33.31 | 5.93 | 24.67 | 328 | 0.11 |
| 41 | 13.96 | 33.25 | 6.13 | 310 | 50 | 13.21 | 33.28 | 5.92 | 25.04 | 293 | 0.17 |
| | | | | | 75 | 10.65 | 33.51 | 4.08 | 25.70 | 230 | 0.23 |
| 44 | - | 33.24 | 6.09 | | 100 | 10.70 | 33.83 | 2.75 | 25.94 | 207 | 0.29 |
| 51 | 13.12 | 33.28 | 5.87 | 291 | 150 | 10.35 | 34.32 | 1.30 | 26.38 | 165 | 0.38 |
| 62 | 11.84 | 33.27 | 4.92 | 268 | 200 | 10.04 | 34.47 | 0.84 | 26.55 | 149 | 0.46 |
| 76 | 10.59 | 33.51 | 4.04 | 229 | 250 | 9.62 | 34.49 | 0.58 | 26.64 | 141 | 0.54 |
| 92 | 10.27 | 33.72 | 3.26 | 208 | 300 | 9.10 | 34.46 | 0.42 | 26.70 | 135 | 0.61 |
| 117 | 10.68 | 33.95 | 1.71 | 198 | | | | | | | |
| 145 | 10.39 | 34.29 | 1.33 | 168 | | | | | | | |
| 225 | 9.86 | 34.49 | 0.62 | 145 | | | | | | | |
| 287 | 9.26 | 34.31u | 0.47 | | | | | | | | |
| 372 | 8.18 | 34.40 | 0.23 | 126 | | | | | | | |

PAOLINA-T; July 15, 1952; 2308 GCT; 27°13.5'N, 116°23'W; sounding, 2150 fm; wind, 330°, force 4; weather, overcast; sea, moderate; wire angle, 05°. 120.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.68 | 33.42 | 5.50 | 400 | 0 | 18.68 | 33.42 | 5.50 | 23.92 | 400 | 0.00 |
| 10 | 18.69 | 33.43 | 5.64 | 399 | 10 | 18.69 | 33.43 | 5.64 | 23.92 | 399 | 0.04 |
| 25 | 18.48 | 33.42 | 5.57 | 395 | 20 | 18.50 | 33.42 | 5.59 | 23.96 | 396 | 0.08 |
| 51 | 15.69 | 33.35 | 6.18 | 338 | 30 | 18.48 | 33.42 | 5.60 | 23.97 | 395 | 0.12 |
| 76 | 13.58 | 33.21 | 5.97 | 305 | 50 | 15.91 | 33.36 | 6.16 | 24.53 | 342 | 0.19 |
| 101 | - | 33.30 | 5.19 | | 75 | 13.60 | 33.21 | 5.98 | 24.91 | 305 | 0.27 |
| 160 | 10.30 | 33.85 | 2.99 | 199 | 100 | 12.61 | 33.30 | 5.22 | 25.17 | 280 | 0.35 |
| 204 | 9.40 | 34.14 | 2.44 | 164 | 150 | 10.62 | 33.75 | 3.18 | 25.89 | 212 | 0.47 |
| 252 | 9.29 | 34.31 | 1.18 | 149 | 200 | 9.42 | 34.11 | 2.50 | 26.37 | 166 | 0.57 |
| 301 | 8.60 | 34.30 | 0.82 | 140 | 250 | 9.31 | 34.31 | 1.21 | 26.55 | 150 | 0.65 |
| 405 | 7.64 | 34.34 | 0.62 | 123 | 300 | 8.62 | 34.30 | 0.83 | 26.65 | 140 | 0.73 |
| 502 | 6.46 | 34.32 | 0.34 | 109 | 400 | 7.68 | 34.34 | 0.64 | 26.82 | 123 | 0.86 |
| 605 | 5.74 | 34.34 | 0.75 | 99 | 500 | 6.48 | 34.32 | 0.35 | 26.97 | 109 | 0.99 |
| 806 | 4.73 | 34.40 | 0.48 | 83 | 600 | 5.78 | 34.34 | 0.72 | 27.08 | 99 | 1.10 |
| 1004 | 4.13 | 34.50 | 0.63 | 69 | 700 | 5.22 | 34.37 | 0.67 | 27.17 | 90 | 1.20 |
| 1213 | 3.58 | 34.49 | 0.88 | 64 | 800 | 4.76 | 34.40 | 0.48 | 27.25 | 83 | 1.30 |
| | | | | | 1000 | 4.15 | 34.50 | 0.62 | 27.39 | 69 | 1.47 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **120.70** | PAOLINA-T; July 15, 1952; 1606 GCT; 26°53.5'N, 117°04'W; sounding, 2100 fm; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 18°. | | | | | | | | | | |
| 0 | 19.11 | 33.48 | 5.50 | 406 | 0 | 19.11 | 33.48 | 5.50 | 23.85 | 406 | 0.00 |
| 10 | 19.14 | 33.44 | 5.39 | 410 | 10 | 19.14 | 33.44 | 5.39 | 23.82 | 410 | 0.04 |
| 19 | 19.13 | 33.51 | 5.29 | 404 | 20 | 19.12 | 33.52 | 5.30 | 23.88 | 403 | 0.08 |
| 33 | 18.96 | 33.60 | 5.39 | 394 | 30 | 18.97 | 33.60 | 5.34 | 23.98 | 394 | 0.12 |
| 53 | 16.13 | 33.41 | 6.23 | 343 | 50 | 16.75 | 33.46 | 6.21 | 24.41 | 353 | 0.20 |
| 66 | - | 33.35 | 5.84 | | 75 | 14.40 | 33.37 | 5.79 | 24.87 | 310 | 0.28 |
| 81 | 13.94 | 33.38 | 5.75 | 300 | 100 | 12.15 | 33.37 | 4.62 | 25.32 | 267 | 0.35 |
| 104 | 11.78 | 33.37 | 4.36 | 260 | 150 | 10.09 | 33.85 | 2.83 | 26.06 | 196 | 0.47 |
| 129 | 10.48 | 33.59 | 3.67 | 221 | 200 | 10.02 | 34.33 | 1.28 | 26.45 | 159 | 0.56 |
| 158 | 10.05 | 33.94 | 2.57 | 189 | 250 | 9.51 | 34.33 | 0.85 | 26.53 | 151 | 0.64 |
| 210 | 9.94 | 34.34 | 1.15 | 157 | 300 | 8.72 | 34.28 | 0.85 | 26.62 | 143 | 0.72 |
| 267 | 9.27 | 34.31 | 0.82 | 149 | 400 | 7.10 | 34.21 | 0.80 | 26.80 | 125 | 0.86 |
| 314 | 8.47 | 34.26 | 0.86 | 141 | 500 | 6.26 | 34.30 | 0.47 | 26.99 | 108 | 0.98 |
| 425 | 6.80 | 34.21 | 0.76 | 121 | 600 | 5.70 | 34.36 | 0.34 | 27.11 | 97 | 1.09 |
| 532 | 6.07 | 34.34 | 0.37 | 103 | | | | | | | |
| 643 | 5.49 | 34.37 | 0.33 | 93 | | | | | | | |
| **120.80** | PAOLINA-T; July 15, 1952; 0835 GCT; 26°33'N, 117°45'W; sounding, 2100 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 19.54 | 33.51 | | 414 | 0 | 19.54 | 33.51 | | 23.77 | 414 | 0.00 |
| 10 | 19.56 | 33.55 | | 412 | 10 | 19.56 | 33.55 | | 23.79 | 412 | 0.04 |
| 25 | 18.65 | 33.44 | | 398 | 20 | 19.55 | 33.54 | | 23.79 | 412 | 0.08 |
| 55 | 16.60 | 33.44 | | 351 | 30 | 18.16 | 33.44 | | 24.06 | 386 | 0.12 |
| 78 | 15.42 | 33.44 | | 325 | 50 | 16.95 | 33.44 | | 24.35 | 359 | 0.20 |
| 106 | - | 33.35 | | | 75 | 15.50 | 33.44 | | 24.68 | 327 | 0.28 |
| 157 | 10.23 | 33.71 | | 209 | 100 | 13.52 | 33.36 | | 25.04 | 293 | 0.36 |
| 207 | 9.64 | 34.16 | | 166 | 150 | 10.50 | 33.66 | | 25.84 | 217 | 0.49 |
| 261 | 9.03 | 34.19 | | 154 | 200 | 9.87 | 34.14 | | 26.32 | 171 | 0.59 |
| 307 | 8.42 | 34.20 | | 144 | 250 | 9.18 | 34.19 | | 26.48 | 156 | 0.67 |
| 414 | 7.32 | 34.32 | | 120 | 300 | 8.52 | 34.20 | | 26.59 | 146 | 0.75 |
| 515 | 6.50 | 34.31 | | 110 | 400 | 7.48 | 34.31 | | 26.83 | 123 | 0.89 |
| 619 | 5.70 | 34.38 | | 95 | 500 | 6.62 | 34.31 | | 26.95 | 112 | 1.02 |
| 822 | 4.73 | 34.41 | | 82 | 600 | 5.82 | 34.37 | | 27.10 | 97 | 1.13 |
| 1028 | 4.05 | 34.49 | | 69 | 700 | 5.27 | 34.39 | | 27.18 | 89 | 1.23 |
| 1228 | 3.50 | 34.52 | | 61 | 800 | 4.82 | 34.41 | | 27.25 | 83 | 1.32 |
| | | | | | 1000 | 4.13 | 34.48 | | 27.38 | 71 | 1.49 |
| **120.90** | PAOLINA-T; July 15, 1952; 0045, 0101 GCT; 26°13.5'N, 118°25.5'W; sounding, 2250 fm; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 19°, 19°. | | | | | | | | | | |
| 0 | 20.03 | 33.75 | 5.35 | 409 | 0 | 20.03 | 33.75 | 5.35 | 23.82 | 409 | 0.00 |
| 10 | 20.06 | 33.76 | 5.45 | 409 | 10 | 20.06 | 33.76 | 5.45 | 23.82 | 409 | 0.04 |
| 19 | 20.02 | 33.75 | 5.48 | 409 | 20 | 20.02 | 33.75 | 5.48 | 23.82 | 409 | 0.08 |
| 33 | 19.18 | 33.72 | 5.62 | 390 | 30 | 20.00 | 33.73 | 5.60 | 23.81 | 410 | 0.12 |
| | | | | | 50 | 17.02 | 33.50 | 5.95 | 24.38 | 356 | 0.20 |
| 46 | 17.32 | 33.53 | 5.87 | 360 | 75 | 15.85 | 33.49 | 5.92 | 24.64 | 331 | 0.29 |
| 58 | - | 33.48 | 6.02 | | 100 | 14.84 | 33.47 | 5.72 | 24.85 | 311 | 0.37 |
| 72 | 15.97 | 33.49 | 5.95 | 333 | 150 | 11.30 | 33.74 | 3.84 | 25.76 | 224 | 0.50 |
| 96 | 15.06 | 33.48 | 5.79 | 315 | 200 | 10.06 | 33.97 | 2.94 | 26.16 | 187 | 0.61 |
| 118 | 12.95 | 33.39 | 5.23 | 280 | 250 | 8.89 | 34.05 | 2.78 | 26.41 | 162 | 0.70 |
| 146 | 11.44 | 33.67 | 4.07 | 232 | 300 | 8.45 | 34.21 | 1.92 | 26.61 | 144 | 0.78 |
| 197 | 10.02 | 33.96 | 2.97 | 187 | 400 | 7.84 | 34.38 | 0.57 | 26.83 | 123 | 0.91 |
| 254 | 8.89 | 34.07 | 2.75 | 161 | 500 | 6.76 | 34.34 | 0.38 | 26.95 | 111 | 1.04 |
| 301 | 8.44 | 34.21 | 1.91 | 144 | 600 | 6.00 | 34.37 | 0.31 | 27.08 | 99 | 1.15 |
| 410 | 7.74 | 34.38 | 0.52 | 121 | | | | | | | |
| 515 | 6.60 | 34.34 | 0.35 | 109 | | | | | | | |
| 622 | 5.88 | 34.38 | 0.31 | 97 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| PAOLINA-T; July 17, 1952; 0814 GCT; 27°23.5'N, 114°41.5'W; sounding, 39 fm; wind, 330°, force 1; weather, partly cloudy; sea, slight; wire angle, 02°. | | | | | | | | | | | 123.37 |
| 0 | 13.84 | 33.86 | 4.17 | 262 | 0 | 13.84 | 33.86 | 4.17 | 25.36 | 262 | 0.00 |
| 10 | 13.57 | 33.86 | 4.06 | 257 | 10 | 13.57 | 33.86 | 4.06 | 25.42 | 257 | 0.03 |
| 20 | 11.47 | 33.85 | 2.42 | 219 | 20 | 11.47 | 33.85 | 2.42 | 25.82 | 219 | 0.05 |
| 25 | 11.72 | 34.09 | 1.28 | 206 | | | | | | | |
| PAOLINA-T; July 17, 1952; 1027 GCT; 27°17.5'N, 114°51.5'W; sounding, 300 fm; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 18°. | | | | | | | | | | | 123.40 |
| 0 | 13.58 | 33.69 | 5.05 | 270 | 0 | 13.58 | 33.69 | 5.05 | 25.28 | 270 | 0.00 |
| 10 | 13.52 | 33.70 | 5.06 | 268 | 10 | 13.52 | 33.70 | 5.06 | 25.30 | 268 | 0.03 |
| 24 | 13.13 | 33.69 | 4.40 | 261 | 20 | 13.27 | 33.69 | 4.86 | 25.34 | 264 | 0.05 |
| 48 | 11.35 | 33.91 | 2.32 | 213 | 30 | 12.47 | 33.70 | 3.83 | 25.51 | 248 | 0.08 |
| 72 | 11.55 | 34.15 | 1.60 | 198 | 50 | 11.32 | 33.91 | 2.25 | 25.89 | 212 | 0.13 |
| 95 | 11.58 | 34.44 | 0.91 | 178 | 75 | 11.67 | 34.19 | 1.48 | 26.04 | 198 | 0.18 |
| 148 | 11.47 | 34.61 | 0.27 | 163 | 100 | 11.43 | 34.46 | 0.79 | 26.30 | 173 | 0.22 |
| 195 | 11.34 | 34.65 | 0.27 | 158 | 150 | 11.45 | 34.62 | 0.27 | 26.42 | 162 | 0.31 |
| 244 | 10.96 | 34.65 | 0.27 | 151 | 200 | 11.33 | 34.65 | 0.27 | 26.46 | 158 | 0.39 |
| 291 | 10.43 | 34.64 | 0.23 | 143 | 250 | 10.93 | 34.65 | 0.27 | 26.53 | 151 | 0.47 |
| 343 | 9.70 | 34.55 | 0.23 | 138 | 300 | 10.32 | 34.63 | 0.25 | 26.63 | 142 | 0.55 |
| 392 | 9.08 | 34.54 | 0.18 | 129 | 400 | 8.97 | 34.54 | 0.18 | 26.78 | 127 | 0.69 |
| 440 | 8.36 | 34.51 | 0.20 | 120 | 500 | (7.33) | (34.49) | (0.28) | (26.99) | (107) | (0.81) |
| 490 | 7.48 | 34.49 | 0.26 | 109 | | | | | | | |
| PAOLINA-T; July 17, 1952; 1653 GCT; 26°58.5'N, 115°29'W; sounding, 2200 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 26°. | | | | | | | | | | | 123.50 |
| 0 | 15.59 | 33.43 | 6.02 | 330 | 0 | 15.59 | 33.43 | 6.02 | 24.65 | 330 | 0.00 |
| 9 | 15.53 | 33.43 | 6.23 | 328 | 10 | 15.53 | 33.43 | 6.22 | 24.67 | 328 | 0.03 |
| 18 | 15.52 | 33.46 | 5.93 | 326 | 20 | 15.51 | 33.46 | 5.92 | 24.69 | 326 | 0.07 |
| 32 | 15.11 | 33.40 | 6.34 | 322 | 30 | 15.25 | 33.41 | 6.33 | 24.71 | 324 | 0.10 |
| 45 | 14.10 | 33.36 | 5.88 | 304 | 50 | 13.83 | 33.34 | 5.74 | 24.96 | 300 | 0.16 |
| 59 | - | 33.30 | 5.58 | | 75 | 12.05 | 33.32 | 5.18 | 25.30 | 268 | 0.23 |
| 72 | 12.08 | 33.31 | 5.28 | 270 | 100 | 10.92 | 33.79 | 3.05 | 25.87 | 214 | 0.29 |
| 89 | 11.44 | 33.59 | 3.93 | 238 | 150 | 10.46 | 34.24 | 1.40 | 26.30 | 173 | 0.39 |
| 108 | 10.78 | 33.92 | 2.60 | 202 | 200 | 10.02 | 34.42 | 0.76 | 26.52 | 153 | 0.47 |
| 133 | 10.56 | 34.14 | 1.68 | 182 | 250 | 9.81 | 34.45 | 0.70 | 26.57 | 147 | 0.55 |
| 172 | 10.24 | 34.34 | 1.02 | 162 | 300 | 9.20 | 34.44 | 0.53 | 26.67 | 138 | 0.63 |
| 212 | 9.93 | 34.43 | 0.70 | 150 | 400 | 7.79 | 34.44 | 0.32 | 26.89 | 117 | 0.76 |
| 253 | 9.78 | 34.45 | 0.69 | 147 | 500 | 6.82 | 34.41 | 0.29 | 27.00 | 107 | 0.88 |
| 342 | 8.50 | 34.43 | 0.40 | 128 | | | | | | | |
| 431 | 7.42 | 34.44 | 0.30 | 112 | | | | | | | |
| 531 | 6.58 | 34.39 | 0.29 | 105 | | | | | | | |
| PAOLINA-T; July 17, 1952; 2247 GCT; 26°39'N, 116°08'W; sounding, 2280 fm; wind, 330°, force 3; weather, overcast; sea, moderate; wire angle, 12°. | | | | | | | | | | | 123.60 |
| 0 | 19.30 | 33.51 | 5.40 | 408 | 0 | 19.30 | 33.51 | 5.40 | 23.83 | 408 | 0.00 |
| 10 | 19.31 | 33.57 | 5.40 | 404 | 10 | 19.31 | 33.57 | 5.40 | 23.87 | 404 | 0.04 |
| 20 | 19.25 | 33.56 | 5.44 | 403 | 20 | 19.25 | 33.56 | 5.44 | 23.88 | 403 | 0.08 |
| 35 | 18.76 | 33.52 | 5.47 | 395 | 30 | 19.23 | 33.55 | 5.46 | 23.88 | 404 | 0.12 |
| 50 | 17.17 | 33.40 | 5.86 | 366 | 50 | 17.17 | 33.40 | 5.86 | 24.27 | 366 | 0.20 |
| 64 | - | 33.43 | 5.99 | | 75 | 14.90 | 33.37 | 6.05 | 24.76 | 320 | 0.28 |
| 78 | 14.63 | 33.37 | 6.06 | 314 | 100 | 12.98 | 33.40 | 5.40 | 25.18 | 280 | 0.36 |
| 98 | 13.16 | 33.40 | 5.50 | 283 | 150 | 10.80 | 33.81 | 3.37 | 25.91 | 211 | 0.48 |
| 122 | 11.40 | 33.41 | 5.07 | 250 | 200 | 10.07 | 34.30 | 1.49 | 26.41 | 162 | 0.58 |
| 150 | 10.80 | 33.81 | 3.37 | 211 | 250 | 9.58 | 34.35 | 0.95 | 26.54 | 151 | 0.66 |
| 198 | 10.07 | 34.30 | 1.53 | 162 | 300 | 9.19 | 34.39 | 0.60 | 26.63 | 142 | 0.74 |
| 245 | 9.62 | 34.34 | 0.99 | 152 | 400 | 7.94 | 34.35 | 0.48 | 26.79 | 126 | 0.88 |
| 294 | 9.24 | 34.39 | 0.62 | 143 | 500 | 7.22 | 34.37 | 0.25 | 26.91 | 115 | 1.00 |
| 395 | 8.00 | 34.35 | 0.49 | 127 | 600 | (6.24) | (34.40) | (0.26) | (27.07) | (100) | (1.12) |
| 492 | 7.25 | 34.37 | 0.25 | 115 | | | | | | | |
| 597 | 6.28 | 34.40 | 0.26 | 101 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 127.34 | PAOLINA-T; July 18, 1952; 2303 GCT; 26°54.5'N, 114°05.5'W; sounding, 44 fm; wind, 330°, force 4; weather, partly cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 15.74 | 33.69 | 5.99 | 314 | 0 | 15.74 | 33.69 | 5.99 | 24.82 | 314 | 0.00 |
| 10 | 13.78 | 33.68 | 4.66 | 274 | 10 | 13.78 | 33.68 | 4.66 | 25.23 | 274 | 0.03 |
| 20 | 12.62 | 33.78 | 2.94 | 245 | 20 | 12.62 | 33.78 | 2.94 | 25.54 | 245 | 0.06 |
| 30 | 11.70 | 33.86 | 2.21 | 222 | 30 | 11.70 | 33.86 | 2.21 | 25.78 | 222 | 0.08 |
| 51 | 11.97 | 34.22 | 0.47 | 201 | 50 | 11.95 | 34.21 | 0.49 | 26.00 | 201 | 0.12 |
| 127.40 | PAOLINA-T; July 18, 1952; 1815 GCT; 26°40.5'N, 114°31.5'W; sounding, 2100 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | 17.93 | 33.54 | 5.71 | 374 | 0 | 17.93 | 33.54 | 5.71 | 24.19 | 374 | 0.00 |
| 10 | 17.90 | 33.54 | 5.77 | 373 | 10 | 17.90 | 33.54 | 5.77 | 24.20 | 373 | 0.04 |
| 20 | 17.76 | 33.58 | 5.85 | 367 | 20 | 17.76 | 33.58 | 5.85 | 24.26 | 367 | 0.07 |
| 35 | 13.82 | 33.42 | 5.96 | 294 | 30 | 17.50 | 33.53 | 5.94 | 24.29 | 364 | 0.11 |
| 55 | 11.89 | 33.40 | 4.87 | 260 | 50 | 12.25 | 33.40 | 5.50 | 25.32 | 266 | 0.17 |
| 70 | - | 33.59 | 4.02 | | 75 | 10.80 | 33.59 | 3.96 | 25.73 | 227 | 0.24 |
| 85 | 10.37 | 33.59 | 3.88 | 220 | 100 | 10.09 | 33.69 | 3.70 | 25.94 | 208 | 0.29 |
| 115 | 9.62 | 33.83 | 3.38 | 190 | 150 | 9.50 | 34.15 | 2.45 | 26.39 | 164 | 0.39 |
| 134 | 9.59 | 34.04 | 2.84 | 174 | 200 | 9.33 | 34.31 | 1.70 | 26.55 | 150 | 0.47 |
| 164 | 9.43 | 34.22 | 2.16 | 158 | 250 | 8.80 | 34.37 | 0.92 | 26.68 | 137 | 0.54 |
| 219 | 8.82 | 34.34 | 1.45 | 140 | 300 | 8.52 | 34.40 | 0.58 | 26.74 | 131 | 0.61 |
| 278 | 8.74 | 34.39 | 0.68 | 135 | 400 | 7.68 | 34.47 | 0.36 | 26.93 | 114 | 0.74 |
| 327 | 8.22 | 34.41 | 0.52 | 126 | 500 | 6.94 | 34.45 | 0.33 | 27.02 | 105 | 0.85 |
| 442 | 7.38 | 34.50 | 0.28 | 107 | 600 | 6.15 | 34.38 | 0.32 | 27.07 | 100 | 0.97 |
| 550 | 6.53 | 34.40 | 0.38 | 104 | | | | | | | |
| 660 | 5.74 | 34.37 | 0.25 | 96 | | | | | | | |
| 127.50 | PAOLINA-T; July 18, 1952; 1103 GCT; 26°21'N, 115°07.5'W; sounding, 1775 fm; wind, 330°, force 3; weather, overcast; sea, moderate; wire angle, 19°. | | | | | | | | | | |
| 0 | 16.05 | 33.43 | 5.96 | 340 | 0 | 16.05 | 33.43 | 5.96 | 24.55 | 340 | 0.00 |
| 10 | 16.08 | 33.40 | 5.89 | 342 | 10 | 16.08 | 33.40 | 5.89 | 24.52 | 342 | 0.03 |
| 20 | 15.96 | 33.43 | 6.04 | 338 | 20 | 15.96 | 33.43 | 6.04 | 24.57 | 338 | 0.07 |
| 34 | 15.72 | 33.57 | 5.97 | 322 | 30 | 15.77 | 33.57 | 5.98 | 24.72 | 323 | 0.10 |
| 53 | 15.06 | 33.55 | 6.06 | 310 | 50 | 15.50 | 33.56 | 6.05 | 24.77 | 318 | 0.17 |
| 67 | - | 33.31 | 5.69 | | 75 | 12.20 | 33.35 | 5.12 | 25.29 | 269 | 0.24 |
| 80 | 11.70 | 33.41 | 4.87 | 256 | 100 | 10.79 | 33.66 | 3.66 | 25.79 | 221 | 0.30 |
| 102 | 10.74 | 33.71 | 3.55 | 217 | 150 | 10.30 | 34.15 | 1.73 | 26.26 | 177 | 0.40 |
| 122 | 10.54 | 33.88 | 2.65 | 201 | 200 | 10.24 | 34.48 | 0.93 | 26.52 | 152 | 0.49 |
| 149 | 10.31 | 34.14 | 1.74 | 178 | 250 | 9.74 | 34.51 | 0.48 | 26.63 | 141 | 0.56 |
| 194 | 10.24 | 34.47 | 1.01 | 153 | 300 | 9.08 | 34.49 | 0.45 | 26.73 | 133 | 0.63 |
| 247 | 9.77 | 34.51 | 0.49 | 142 | 400 | 7.92 | 34.45 | 0.39 | 26.87 | 119 | 0.77 |
| 288 | 9.24 | 34.50 | 0.46 | 134 | 500 | 6.62 | 34.36 | 0.41 | 26.99 | 108 | 0.89 |
| 391 | 8.02 | 34.46 | 0.38 | 119 | 600 | 5.98 | 34.39 | 0.36 | 27.09 | 98 | 1.00 |
| 492 | 6.68 | 34.36 | 0.42 | 109 | | | | | | | |
| 600 | 5.98 | 34.39 | 0.36 | 98 | | | | | | | |
| 127.60 | PAOLINA-T; July 18, 1952; 0437 GCT; 26°03'N, 115°46'W; sounding, 2100 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 17°. | | | | | | | | | | |
| 0 | 19.80 | 33.64 | 5.24 | 411 | 0 | 19.80 | 33.64 | 5.24 | 23.80 | 411 | 0.00 |
| 10 | 19.84 | 33.69 | 5.35 | 409 | 10 | 19.84 | 33.69 | 5.35 | 23.83 | 409 | 0.04 |
| 19 | 19.83 | 33.67 | 5.37 | 410 | 20 | 19.83 | 33.67 | 5.37 | 23.81 | 410 | 0.08 |
| 34 | 19.83 | 33.62 | 5.37 | 413 | 30 | 19.83 | 33.63 | 5.37 | 23.78 | 413 | 0.12 |
| 48 | 19.27 | 33.78 | 5.60 | 388 | 50 | 19.08 | 33.78 | 5.60 | 24.09 | 383 | 0.20 |
| 61 | - | 33.71 | 5.62 | | 75 | 15.92 | 33.63 | 5.94 | 24.73 | 322 | 0.29 |
| 75 | 15.92 | 33.63 | 5.94 | 322 | 100 | 14.72 | 33.62 | 5.00 | 24.99 | 298 | 0.37 |
| 94 | 15.07 | 33.61 | 5.38 | 306 | 150 | 11.03 | 33.90 | 2.52 | 25.93 | 208 | 0.50 |
| 117 | 13.02 | 33.69 | 4.15 | 259 | 200 | 10.85 | 34.28 | 1.52 | 26.26 | 177 | 0.60 |
| 145 | 11.22 | 33.87 | 2.79 | 213 | 250 | 9.57 | 34.24 | 1.42 | 26.45 | 159 | 0.68 |
| 192 | 10.86 | 34.28 | 1.53 | 177 | 300 | 9.07 | 34.34 | 0.84 | 26.61 | 144 | 0.76 |
| 239 | 9.73 | 34.23 | 1.51 | 162 | 400 | 8.20 | 34.48 | 0.27 | 26.86 | 120 | 0.90 |
| 257 | 9.44 | 34.25 | 1.33 | 156 | 500 | 6.99 | 34.41 | 0.28 | 26.98 | 109 | 1.02 |
| 387 | 8.36 | 34.48 | 0.27 | 123 | 600 | (6.13) | (34.38) | | (27.07) | (100) | (1.13) |
| 485 | 7.17 | 34.42 | 0.29 | 111 | | | | | | | |
| 588 | 6.20 | 34.38 | 0.18 | 101 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

PAOLINA-T; July 19, 1952; 1013 GCT; 26°29'N, 113°29'W; sounding, 42 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 03°. 130.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.26 | 33.86 | 4.80 | 313 | 0 | 16.26 | 33.86 | 4.80 | 24.83 | 313 | 0.00 |
| 9 | 15.22 | 33.81 | 4.74 | 294 | 10 | 15.12 | 33.81 | 4.72 | 25.05 | 292 | 0.03 |
| 19 | 12.11 | 33.82 | 2.89 | 233 | 20 | 12.09 | 33.82 | 2.87 | 25.68 | 232 | 0.06 |
| 30 | 11.98 | 33.86 | 2.65 | 227 | 30 | 11.98 | 33.86 | 2.65 | 25.73 | 227 | 0.08 |
| 49 | 11.88 | 34.21 | 1.32 | 200 | | | | | | | |

PAOLINA-T; July 19, 1952; 1621 GCT; 26°19'N, 113°48.5'W; sounding, 1275 fm; wind, 330°, force 1; weather, partly cloudy; sea, moderate; wire angle, 28°. 130.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.43 | 33.70 | | 328 | 0 | 16.43 | 33.70 | | 24.67 | 328 | 0.00 |
| 9 | 16.35 | 33.58 | | 335 | 10 | 16.34 | 33.58 | | 24.60 | 335 | 0.03 |
| 18 | 16.23 | 33.54 | | 335 | 20 | 16.20 | 33.54 | | 24.60 | 335 | 0.07 |
| 31 | 15.82 | 33.51 | | 329 | 30 | 15.89 | 33.51 | | 24.65 | 330 | 0.10 |
| 44 | 13.73 | 33.34 | | 298 | 50 | 12.70 | 33.38 | | 25.22 | 276 | 0.16 |
| 57 | - | 33.48 | | | 75 | 11.98 | 33.80 | | 25.68 | 232 | 0.22 |
| 68 | 11.78 | 33.64 | | 240 | 100 | 12.21 | 34.30 | | 26.02 | 199 | 0.28 |
| 83 | 11.96 | 33.96 | | 220 | 150 | 11.70 | 34.56 | | 26.32 | 171 | 0.37 |
| 101 | 12.20 | 34.31 | | 198 | 200 | 11.39 | 34.64 | | 26.44 | 159 | 0.46 |
| 123 | 12.08 | 34.52 | | 181 | 250 | 10.95 | 34.56 | | 26.46 | 158 | 0.54 |
| 161 | 11.70 | 34.58 | | 169 | 300 | 10.26 | 34.53 | | 26.56 | 148 | 0.62 |
| 200 | 11.39 | 34.64 | | 159 | 400 | 8.88 | 34.51 | | 26.77 | 128 | 0.76 |
| 241 | 11.04 | 34.57 | | 159 | 500 | 7.78 | 34.49 | | 26.93 | 114 | 0.89 |
| 329 | 9.82 | 34.52 | | 142 | | | | | | | |
| 420 | 8.64 | 34.51 | | 125 | | | | | | | |
| 522 | 7.55 | 34.48 | | 111 | | | | | | | |

PAOLINA-T; July 19, 1952; 2002 GCT; 26°08.5'N, 114°09'W; sounding, 1650 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 10°. 130.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.59 | 33.52 | 5.50 | 391 | 0 | 18.59 | 33.52 | 5.50 | 24.01 | 391 | 0.00 |
| 10 | 18.28 | 33.48 | 5.45 | 386 | 10 | 18.28 | 33.48 | 5.45 | 24.06 | 386 | 0.04 |
| 24 | 18.13 | 33.48 | 5.39 | 383 | 20 | 18.17 | 33.48 | 5.41 | 24.09 | 384 | 0.08 |
| 49 | 16.58 | 33.51 | 5.74 | 345 | 30 | 18.14 | 33.48 | 5.42 | 24.10 | 383 | 0.12 |
| 73 | 14.93 | 33.54 | 5.81 | 308 | 50 | 16.48 | 33.51 | 5.75 | 24.51 | 343 | 0.19 |
| 98 | - | 33.42 | 4.74 | | 75 | 14.90 | 33.54 | 5.80 | 24.89 | 307 | 0.27 |
| 147 | 10.51 | 34.02 | 2.55 | 190 | 100 | 11.45 | 33.44 | 4.50 | 25.50 | 249 | 0.34 |
| 192 | 9.70 | 34.25 | 1.77 | 160 | 150 | 10.48 | 34.07 | 2.47 | 26.16 | 186 | 0.45 |
| 237 | 9.18 | 34.33 | 1.34 | 146 | 200 | 9.47 | 34.27 | 1.70 | 26.49 | 155 | 0.54 |
| 282 | 9.04 | 34.42 | 0.60 | 137 | 250 | 9.15 | 34.36 | 1.13 | 26.61 | 143 | 0.61 |
| 378 | 8.24 | 34.44 | 0.37 | 124 | 300 | 8.94 | 34.43 | 0.51 | 26.70 | 135 | 0.69 |
| 470 | 7.62 | 34.44 | 0.20 | 115 | 400 | 8.10 | 34.44 | 0.32 | 26.84 | 122 | 0.82 |
| 567 | 6.20 | 34.43 | 0.22 | 97 | 500 | 7.29 | 34.44 | 0.20 | 26.96 | 111 | 0.95 |
| 762 | 5.11 | 34.53 | 0.28 | 77 | 600 | 5.95 | 34.44 | 0.23 | 27.14 | 94 | 1.06 |
| 958 | 4.37 | 34.54 | 0.49 | 68 | 700 | 5.38 | 34.51 | 0.24 | 27.26 | 82 | 1.15 |
| 1159 | 3.74 | 34.52 | 0.55 | 64 | 800 | 4.95 | 34.54 | 0.31 | 27.34 | 75 | 1.24 |
| | | | | | 1000 | 4.23 | 34.54 | 0.51 | 27.42 | 67 | 1.40 |

PAOLINA-T; July 20, 1952; 0020 GCT;[a] 25°58.5'N, 114°28'W; sounding, 2100 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 00°. 130.45

| | |
|---|---|
| 0 | 19.23 |
| 10 | 18.98 |
| 25 | 18.92 |
| 50 | 18.11 |
| 75 | 16.05 |
| 100 | 13.81 |
| 125 | 12.19 |
| 150 | 10.83 |
| 175 | 10.30 |
| 200 | 9.77 |
| 225 | 9.72 |
| 250 | 9.26 |
| 270 | 9.15 |
| 280 | 9.13 |
| 300 | 8.43 |

a) Bathythermograph calibration cast.

SIO

CCOFI 5207

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

130.50 PAOLINA-T; July 20, 1952; 0325 GCT; 25°48.5'N, 114°47.5'W; sounding, 1950 fm; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.29 | 33.53 | 5.54 | 407 | 0 | 19.29 | 33.53 | 5.54 | 23.85 | 407 | 0.00 |
| 10 | 19.32 | 33.57 | 5.73 | 404 | 10 | 19.32 | 33.57 | 5.73 | 23.87 | 404 | 0.04 |
| 20 | 19.29 | 33.58 | 5.64 | 403 | 20 | 19.29 | 33.58 | 5.64 | 23.88 | 403 | 0.08 |
| 35 | 18.55 | 33.59 | 5.88 | 384 | 30 | 19.10 | 33.59 | 5.77 | 23.94 | 398 | 0.12 |
| 50 | 17.58 | 33.65 | 6.02 | 358 | 50 | 17.58 | 33.65 | 6.02 | 24.36 | 358 | 0.20 |
| 65 | - | 33.66 | 6.10 | | 75 | 15.80 | 33.60 | 6.06 | 24.74 | 322 | 0.28 |
| 80 | 15.53 | 33.56 | 6.04 | 319 | 100 | 14.34 | 33.51 | 5.68 | 24.99 | 298 | 0.36 |
| 100 | 14.34 | 33.51 | 5.68 | 298 | 150 | 10.69 | 33.81 | 3.45 | 25.92 | 209 | 0.49 |
| 125 | 11.68 | 33.68 | 3.90 | 235 | 200 | 9.69 | 34.12 | 2.50 | 26.34 | 170 | 0.58 |
| 164 | 10.42 | 33.87 | 3.23 | 200 | 250 | 8.89 | 34.15 | 2.23 | 26.49 | 155 | 0.67 |
| 205 | 9.60 | 34.13 | 2.43 | 167 | 300 | 8.48 | 34.30 | 1.50 | 26.67 | 138 | 0.74 |
| 255 | 8.80 | 34.16 | 2.21 | 153 | 400 | 7.52 | 34.33 | 0.88 | 26.84 | 122 | 0.88 |
| 305 | 8.43 | 34.31 | 1.44 | 136 | 500 | 6.77 | 34.38 | 0.63 | 26.98 | 108 | 1.00 |
| 410 | 7.44 | 34.33 | 0.83 | 121 | 600 | 6.16 | 34.38 | 0.42 | 27.06 | 101 | 1.11 |
| 510 | 6.70 | 34.38 | 0.61 | 107 | | | | | | | |
| 620 | 6.04 | 34.38 | 0.38 | 99 | | | | | | | |

130.60 PAOLINA-T; July 20, 1952; 0935 GCT; 25°28'N, 115°26'W; sounding, 2050 fm; wind, 330°, force 3; weather, clear; sea, rough; wire angle, 13°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.76 | 33.77 | 5.66 | 426 | 0 | 20.76 | 33.77 | 5.66 | 23.64 | 426 | 0.00 |
| 10 | 20.82 | 33.79 | 5.47 | 426 | 10 | 20.82 | 33.79 | 5.47 | 23.64 | 426 | 0.04 |
| 24 | 20.81 | 33.78 | 5.35 | 426 | 20 | 20.81 | 33.78 | 5.37 | 23.64 | 426 | 0.09 |
| 50 | 17.86 | 33.51 | 5.81 | 374 | 30 | 20.80 | 33.76 | 5.39 | 23.63 | 428 | 0.13 |
| 73 | 15.48 | 33.64 | 5.92 | 312 | 50 | 17.86 | 33.51 | 5.81 | 24.19 | 374 | 0.21 |
| 98 | - | 33.80 | 4.77 | | 75 | 15.46 | 33.65 | 5.92 | 24.85 | 311 | 0.29 |
| 152 | 11.83 | 34.23 | 1.80 | 197 | 100 | 14.10 | 33.83 | 4.48 | 25.28 | 270 | 0.37 |
| 201 | 10.89 | 34.42 | 1.18 | 167 | 150 | 11.88 | 34.22 | 1.85 | 26.03 | 199 | 0.49 |
| 249 | 10.30 | 34.52 | 0.70 | 150 | 200 | 10.93 | 34.42 | 1.19 | 26.36 | 168 | 0.58 |
| 297 | 9.58 | 34.52 | 0.50 | 138 | 250 | 10.29 | 34.52 | 0.69 | 26.55 | 150 | 0.66 |
| 399 | 8.14 | 34.42 | 0.36 | 124 | 300 | 9.53 | 34.52 | 0.49 | 26.68 | 137 | 0.74 |
| 495 | 7.09 | 34.43 | 0.24 | 109 | 400 | 8.12 | 34.42 | 0.35 | 26.82 | 124 | 0.87 |
| 597 | 6.30 | 34.42 | 0.26 | 99 | 500 | 7.05 | 34.43 | 0.24 | 26.98 | 108 | 1.00 |
| 795 | 5.12 | 34.54 | 0.37 | 76 | 600 | 6.28 | 34.42 | 0.27 | 27.08 | 99 | 1.11 |
| 993 | 4.26 | 34.50 | 0.49 | 70 | 700 | 5.63 | 34.49 | 0.32 | 27.22 | 86 | 1.21 |
| 1214 | 3.70 | 34.58 | 0.79 | 59 | 800 | 5.10 | 34.54 | 0.38 | 27.32 | 76 | 1.30 |
| | | | | | 1000 | 4.23 | 34.50 | 0.50 | 27.39 | 70 | 1.47 |

133.25 PAOLINA-T; July 21, 1952; 1133 GCT; 26°01.5'N, 112°49.5'W; sounding, 50 fm; wind, 160°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.72 | 33.94 | 5.97 | 413 | 0 | 20.72 | 33.94 | 5.97 | 23.78 | 413 | 0.00 |
| 10 | 15.17 | 33.97 | 4.09 | 281 | 10 | 15.17 | 33.97 | 4.09 | 25.16 | 281 | 0.03 |
| 20 | 13.44 | 34.05 | 1.58 | 241 | 20 | 13.44 | 34.05 | 1.58 | 25.59 | 241 | 0.06 |
| 30 | 12.89 | 34.30 | 0.97 | 212 | 30 | 12.89 | 34.30 | 0.97 | 25.89 | 212 | 0.08 |
| 50 | 12.75 | 34.40 | 0.20 | 202 | 50 | 12.75 | 34.40 | 0.20 | 26.00 | 202 | 0.13 |

133.30 PAOLINA-T; July 21, 1952; 0700 GCT; 25°45'N, 113°22'W; sounding, 240 fm; wind, 160°, force 1; weather, partly cloudy; sea, slight; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.64 | 33.69 | 6.00 | 379 | 0 | 18.64 | 33.69 | 6.00 | 24.13 | 379 | 0.00 |
| 10 | 17.57 | 33.71 | 6.37 | 353 | 10 | 17.57 | 33.71 | 6.37 | 24.41 | 353 | 0.04 |
| 25 | 13.10 | 33.66 | 4.54 | 263 | 20 | 14.50 | 33.67 | 5.80 | 25.07 | 290 | 0.07 |
| 50 | 11.45 | 33.83 | - | 220 | 30 | 12.70 | 33.67 | 4.15 | 25.44 | 255 | 0.10 |
| 75 | 11.43 | 34.13 | 2.26 | 198 | 50 | 11.45 | 33.83 | | 25.80 | 220 | 0.14 |
| 101 | 11.16 | 34.28 | 1.72 | 182 | 75 | 11.43 | 34.13 | 2.26 | 26.04 | 198 | 0.20 |
| 154 | 11.75 | 34.70 | 0.23 | 161 | 100 | 11.17 | 34.27 | 1.75 | 26.20 | 183 | 0.24 |
| 202 | 11.48 | 34.72 | 0.17 | 155 | 150 | 11.60 | 34.68 | 0.27 | 26.44 | 160 | 0.33 |
| 252 | 11.25 | 34.72 | 0.16 | 151 | 200 | 11.49 | 34.72 | 0.17 | 26.49 | 155 | 0.41 |
| 302 | 10.86 | 34.72 | 0.19 | 144 | 250 | 11.28 | 34.72 | 0.16 | 26.53 | 152 | 0.49 |
| | | | | | 300 | 10.89 | 34.72 | 0.19 | 26.60 | 145 | 0.57 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m | |
| PAOLINA-T; July 21, 1952; 0029 GCT; 25°29'N, 113°54'W; sounding, 2100 fm; wind, 140°, force 1; weather, partly cloudy; sea, rough; wire angle, 07°. | | | | | | | | | | | | 133.40 |
| 0 | 19.00 | 33.46 | 5.87 | 405 | 0 | 19.00 | 33.46 | 5.87 | 23.87 | 405 | 0.00 | |
| 10 | 17.47 | 33.49 | 5.68 | 367 | 10 | 17.47 | 33.49 | 5.68 | 24.27 | 367 | 0.04 | |
| 20 | 16.97 | 33.42 | 6.07 | 360 | 20 | 16.97 | 33.42 | 6.07 | 24.33 | 360 | 0.07 | |
| 35 | 15.84 | 33.40 | 6.03 | 337 | 30 | 16.34 | 33.40 | 6.05 | 24.46 | 348 | 0.11 | |
| 50 | 15.11 | 33.47 | 6.23 | 317 | 50 | 15.11 | 33.47 | 6.23 | 24.79 | 317 | 0.18 | |
| 65 | - | 33.36 | 5.54 | | 75 | 11.75 | 33.42 | 5.00 | 25.43 | 256 | 0.25 | |
| 80 | 11.64 | 33.45 | 4.85 | 252 | 100 | 11.60 | 33.88 | 3.20 | 25.81 | 219 | 0.31 | |
| 99 | 11.54 | 33.84 | 3.33 | 221 | 150 | 10.92 | 34.34 | 1.58 | 26.30 | 173 | 0.41 | |
| 123 | 11.49 | 34.21 | 1.76 | 193 | 200 | 10.90 | 34.58 | 0.42 | 26.49 | 155 | 0.49 | |
| 153 | 10.80 | 34.35 | 1.56 | 171 | 250 | 10.33 | 34.58 | 0.26 | 26.59 | 146 | 0.57 | |
| 201 | 10.87 | 34.58 | 0.41 | 155 | 300 | 9.45 | 34.56 | 0.52 | 26.72 | 133 | 0.64 | |
| 251 | 10.31 | 34.58 | 0.25 | 146 | 400 | 8.22 | 34.53 | 0.47 | 26.89 | 117 | 0.77 | |
| 300 | 9.45 | 34.56 | 0.52 | 133 | 500 | 7.26 | 34.50 | 0.38 | 27.01 | 106 | 0.89 | |
| 403 | 8.18 | 34.53 | 0.46 | 116 | 600 | 6.32 | 34.52 | 0.38 | 27.15 | 92 | 1.00 | |
| 502 | 7.22 | 34.50 | 0.37 | 105 | | | | | | | | |
| 606 | 6.27 | 34.52 | 0.38 | 92 | | | | | | | | |
| PAOLINA-T; July 20, 1952; 1746 GCT; 25°13'N, 114°26.5'W; sounding, 2100 fm; wind, 340°, force 1; weather, overcast; sea, moderate; wire angle, 08°. | | | | | | | | | | | | 133.50 |
| 0 | 19.23 | 33.51 | 5.42 | 407 | 0 | 19.23 | 33.51 | 5.42 | 23.85 | 407 | 0.00 | |
| 10 | 19.02 | 33.59 | 5.49 | 396 | 10 | 19.02 | 33.59 | 5.49 | 23.96 | 396 | 0.04 | |
| 20 | 18.98 | 33.54 | 5.50 | 398 | 20 | 18.98 | 33.54 | 5.50 | 23.93 | 398 | 0.08 | |
| 35 | 18.60 | 33.62 | 5.59 | 383 | 30 | 18.90 | 33.54 | 5.56 | 23.95 | 396 | 0.12 | |
| 50 | 17.84 | 33.90 | 5.63 | 345 | 50 | 17.84 | 33.90 | 5.63 | 24.49 | 345 | 0.19 | |
| 62 | - | 33.68 | 5.71 | | 75 | 15.47 | 33.87 | 5.05 | 25.02 | 295 | 0.27 | |
| 79 | 15.39 | 33.88 | 5.00 | 293 | 100 | 13.45 | 33.77 | 4.82 | 25.37 | 261 | 0.34 | |
| 100 | 13.45 | 33.77 | 4.82 | 261 | 150 | 11.03 | 33.98 | 2.48 | 26.00 | 202 | 0.46 | |
| 124 | 12.12 | 33.87 | 3.19 | 229 | 200 | 10.52 | 34.38 | 1.26 | 26.40 | 164 | 0.56 | |
| 154 | 10.82 | 34.01 | 2.39 | 196 | 250 | 9.60 | 34.40 | 1.17 | 26.57 | 147 | 0.64 | |
| 202 | 10.50 | 34.38 | 1.23 | 163 | 300 | 8.97 | 34.39 | 1.26 | 26.67 | 138 | 0.71 | |
| 251 | 9.58 | 34.40 | 1.16 | 147 | 400 | 8.36 | 34.53 | 0.25 | 26.87 | 119 | 0.84 | |
| 299 | 8.98 | 34.39 | 1.26 | 139 | 500 | 7.14 | 34.46 | 0.26 | 27.00 | 107 | 0.97 | |
| 400 | 8.36 | 34.53 | 0.25 | 119 | 600 | 6.40 | 34.48 | 0.22 | 27.11 | 96 | 1.08 | |
| 498 | 7.17 | 34.46 | 0.26 | 108 | | | | | | | | |
| 603 | 6.37 | 34.48 | 0.22 | 96 | | | | | | | | |
| PAOLINA-T; July 22, 1952; 1111 GCT; 25°34'N, 112°18'W; sounding, 38 fm; wind, 320°, force 1; weather, fog; sea, slight; wire angle, 03°. | | | | | | | | | | | | 137.23 |
| 0 | 23.32 | 34.01 | 5.46 | 477 | 0 | 23.32 | 34.01 | 5.46 | 23.11 | 477 | 0.00 | |
| 10 | 21.56 | 33.99 | 5.70 | 431 | 10 | 21.56 | 33.99 | 5.70 | 23.59 | 431 | 0.05 | |
| 20 | 14.65 | 34.07 | 3.07 | 263 | 20 | 14.65 | 34.07 | 3.07 | 25.35 | 263 | 0.08 | |
| 30 | 14.20 | 34.14 | 2.07 | 249 | 30 | 14.20 | 34.14 | 2.07 | 25.50 | 249 | 0.11 | |
| 50 | 13.72 | 34.37 | 0.65 | 223 | 50 | 13.72 | 34.37 | 0.65 | 25.78 | 223 | 0.15 | |
| PAOLINA-T; July 22, 1952; 1514 GCT; 25°20'N, 112°45.5'W; sounding, 240 fm; wind, 170°, force 1; weather, fog; sea, moderate; wire angle, 02°. | | | | | | | | | | | | 137.30 |
| 0 | 21.43 | 33.78 | 5.41 | 442 | 0 | 21.43 | 33.78 | 5.41 | 23.47 | 442 | 0.00 | |
| 10 | 18.51 | 33.69 | 5.81 | 376 | 10 | 18.51 | 33.69 | 5.81 | 24.16 | 376 | 0.04 | |
| 20 | 14.07 | 33.46 | 5.85 | 296 | 20 | 14.07 | 33.46 | 5.85 | 25.00 | 296 | 0.07 | |
| 30 | 12.44 | 33.52 | 4.61 | 261 | 30 | 12.44 | 33.52 | 4.61 | 25.38 | 261 | 0.10 | |
| 50 | 12.05 | 33.78 | 3.19 | 235 | 50 | 12.05 | 33.78 | 3.19 | 25.65 | 235 | 0.15 | |
| 75 | 12.03 | 34.14 | 1.94 | 208 | 75 | 12.03 | 34.14 | 1.94 | 25.94 | 208 | 0.21 | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

137.40 PAOLINA-T; July 22, 1952; 2130 GCT; 25°00'N, 113°23'W; sounding, 2050 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.70 | 33.69 | 5.29 | 483 | 0 | 22.70 | 33.69 | 5.29 | 23.05 | 483 | 0.00 |
| 10 | 21.67 | 33.63 | 5.26 | 460 | 10 | 21.67 | 33.63 | 5.26 | 23.29 | 460 | 0.05 |
| 20 | 17.98 | 33.59 | 5.31 | 371 | 20 | 17.98 | 33.59 | 5.31 | 24.22 | 371 | 0.09 |
| 35 | 13.93 | 33.54 | 5.41 | 288 | 30 | 15.08 | 33.56 | 5.38 | 24.87 | 309 | 0.12 |
| 50 | - | 33.50 | 4.46 | | 50 | 12.32 | 33.50 | 4.46 | 25.38 | 260 | 0.18 |
| 65 | 11.42 | 33.57 | 3.89 | 239 | 75 | 10.95 | 33.66 | 3.48 | 25.76 | 224 | 0.24 |
| 80 | 10.82 | 33.70 | 3.44 | 219 | 100 | 10.67 | 33.87 | 3.38 | 25.97 | 204 | 0.29 |
| 99 | 10.68 | 33.86 | 3.39 | 205 | 150 | 9.83 | 34.19 | 2.05 | 26.37 | 167 | 0.39 |
| 124 | 9.92 | 34.04 | 2.69 | 179 | 200 | 10.72 | 34.54 | 0.46 | 26.49 | 155 | 0.47 |
| 154 | 9.94 | 34.22 | 1.93 | 166 | 250 | 9.94 | 34.50 | 0.39 | 26.59 | 145 | 0.55 |
| 202 | 10.62 | 34.55 | 0.44 | 153 | 300 | 9.32 | 34.48 | 0.35 | 26.68 | 137 | 0.62 |
| 251 | 9.92 | 34.50 | 0.39 | 145 | 400 | 8.39 | 34.46 | 0.25 | 26.81 | 125 | 0.76 |
| 300 | 9.32 | 34.48 | 0.35 | 137 | 500 | 7.22 | 34.45 | 0.17 | 26.98 | 109 | 0.88 |
| 404 | 8.33 | 34.46 | 0.24 | 124 | 600 | 6.27 | 34.43 | 0.25 | 27.09 | 98 | 1.00 |
| 502 | 7.18 | 34.45 | 0.17 | 108 | | | | | | | |
| 606 | 6.22 | 34.43 | 0.26 | 98 | | | | | | | |

137.50 PAOLINA-T; July 23, 1952; 0347 GCT; 24°39.5'N, 114°01'W; sounding, 2200 fm; wind, 180°, force 1; weather, fog; sea, moderate; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.35 | 33.45 | 5.79 | 439 | 0 | 20.35 | 33.45 | 5.79 | 23.51 | 439 | 0.00 |
| 10 | 18.14 | 33.45 | 5.90 | 385 | 10 | 18.14 | 33.45 | 5.90 | 24.07 | 385 | 0.04 |
| 20 | 17.86 | 33.53 | 5.97 | 373 | 20 | 17.86 | 33.53 | 5.97 | 24.20 | 373 | 0.08 |
| 35 | 17.42 | 33.45 | 6.08 | 368 | 30 | 17.60 | 33.47 | 6.03 | 24.22 | 371 | 0.12 |
| 50 | 15.79 | 33.49 | 6.34 | 330 | 50 | 15.79 | 33.49 | 6.34 | 24.65 | 330 | 0.19 |
| 64 | - | 33.45 | 6.17 | | 75 | 13.50 | 33.34 | 5.70 | 25.03 | 294 | 0.27 |
| 79 | 13.00 | 33.33 | 5.52 | 285 | 100 | 12.48 | 33.64 | 4.11 | 25.46 | 253 | 0.33 |
| 98 | 12.62 | 33.60 | 4.35 | 258 | 150 | 10.41 | 33.97 | 2.55 | 26.10 | 192 | 0.45 |
| 122 | 11.61 | 33.90 | 3.15 | 218 | 200 | 10.26 | 34.35 | 1.30 | 26.42 | 162 | 0.54 |
| 151 | 10.38 | 33.97 | 2.52 | 192 | 250 | 9.60 | 34.42 | 0.61 | 26.59 | 146 | 0.62 |
| 198 | 10.24 | 34.34 | 1.38 | 162 | 300 | 8.95 | 34.40 | 0.60 | 26.68 | 137 | 0.69 |
| 246 | 9.68 | 34.42 | 0.62 | 147 | 400 | 7.81 | 34.42 | 0.48 | 26.87 | 119 | 0.82 |
| 293 | 9.02 | 34.40 | 0.60 | 138 | 500 | 6.93 | 34.43 | 0.33 | 27.00 | 107 | 0.94 |
| 395 | 7.87 | 34.42 | 0.49 | 120 | 600 | (6.22) | (34.44) | (0.25) | (27.10) | (97) | (1.05) |
| 492 | 6.99 | 34.43 | 0.34 | 107 | | | | | | | |
| 597 | 6.23 | 34.44 | 0.25 | 97 | | | | | | | |

60.55 BLACK DOUGLAS; August 19, 1952; 1615 GCT; 37°46.5'N, 123°11.5'W; sounding, 59 fm; wind, 320°, force 7; weather, clear; sea, very high; wire angle, 06°.

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 10.15 | 5.26 | 0 | 10.15 | 5.26 | |
| 10 | 10.14 | 5.38 | 10 | 10.14 | 5.38 | |
| 20 | 10.10 | 5.30 | 20 | 10.10 | 5.30 | |
| 30 | 9.93 | 5.18 | 30 | 9.93 | 5.18 | |
| 49 | 8.98 | 4.24 | 50 | 8.97 | 4.19 | |
| 74 | 8.52 | 2.92 | 75 | (8.51) | (2.86) | |

63.52 BLACK DOUGLAS; August 19, 1952; 0318 GCT; 37°19'N, 122°36'W; sounding, 48 fm; wind, 280°, force 3; weather, clear; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.51 | 33.06 | 8.42 | 296 | 0 | 12.51 | 33.06 | 8.42 | 25.01 | 296 | 0.00 |
| 10 | 10.80 | 33.35 | 5.92 | 245 | 10 | 10.80 | 33.35 | 5.92 | 25.55 | 245 | 0.03 |
| 20 | 10.29 | 33.46 | 5.14 | 228 | 20 | 10.29 | 33.46 | 5.14 | 25.72 | 228 | 0.05 |
| 30 | 9.02 | 33.44 | 4.00 | 210 | 30 | 9.02 | 33.44 | 4.00 | 25.92 | 210 | 0.07 |
| 50 | 9.06 | 33.62 | 2.44 | 197 | 50 | 9.06 | 33.62 | 2.44 | 26.05 | 197 | 0.11 |

63.55 BLACK DOUGLAS; August 19, 1952; 0535 GCT; 37°14'N, 122°49.5'W; sounding, 120 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 26°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.17 | 32.94 | 6.04 | 317 | 0 | 13.17 | 32.94 | 6.04 | 24.79 | 317 | 0.00 |
| 8 | 13.18 | 32.94 | 6.02 | 317 | 10 | 13.16 | 32.94 | 6.02 | 24.79 | 317 | 0.03 |
| 22 | 12.98 | 32.94 | 6.04 | 313 | 20 | 13.04 | 32.94 | 6.03 | 24.81 | 315 | 0.06 |
| 44 | 10.63 | 32.83 | 5.87 | 280 | 30 | 12.62 | 32.86 | 6.00 | 24.83 | 313 | 0.09 |
| 65 | 9.62 | 32.92 | 5.45 | 257 | 50 | 10.19 | 32.84 | 5.81 | 25.26 | 272 | 0.15 |
| 85 | 8.74 | 33.42 | 4.12 | 207 | 75 | 9.10 | 33.19 | 4.84 | 25.71 | 229 | 0.22 |
| 129 | 8.66 | 33.91 | 2.00 | 169 | 100 | 8.68 | 33.73 | 2.99 | 26.20 | 183 | 0.27 |
| 176 | 8.40 | 33.96 | 1.85 | 162 | 150 | 8.57 | 33.94 | 1.88 | 26.38 | 166 | 0.36 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

BLACK DOUGLAS; August 18, 1952; 2050 GCT; 36°49'N, 122°04.5'W; sounding, 58 fm; wind, 280°, force 4; weather, clear; sea, rough; wire angle, 07°. 67.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.05 | 33.51 | 6.27 | 254 | 0 | 12.05 | 33.51 | 6.27 | 25.44 | 254 | 0.00 |
| 10 | 10.89 | 33.51 | 5.45 | 234 | 10 | 10.89 | 33.51 | 5.45 | 25.66 | 234 | 0.02 |
| 20 | 10.42 | 33.53 | 4.86 | 225 | 20 | 10.42 | 33.53 | 4.86 | 25.75 | 225 | 0.05 |
| 30 | 10.24 | 33.51 | 4.66 | 223 | 30 | 10.24 | 33.51 | 4.66 | 25.77 | 223 | 0.07 |
| 50 | 9.42 | 33.69 | 2.96 | 197 | 50 | 9.42 | 33.69 | 2.96 | 26.05 | 197 | 0.11 |
| 74 | 9.20 | 33.78 | 2.60 | 187 | 75 | (9.18) | (33.79) | (2.58) | (26.16) | (186) | (0.16) |

BLACK DOUGLAS; August 18, 1952; 1726 GCT; 36°39'N, 122°26'W; sounding, 1150 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 23°. 67.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.39 | 33.22 | 6.15 | 282 | 0 | 12.39 | 33.22 | 6.15 | 25.15 | 282 | 0.00 |
| 9 | 11.64 | 33.31 | 6.15 | 262 | 10 | 11.60 | 33.31 | 6.14 | 25.37 | 261 | 0.03 |
| 18 | 10.96 | 33.31 | 5.58 | 250 | 20 | 10.87 | 33.32 | 5.48 | 25.51 | 248 | 0.05 |
| 32 | 10.12 | 33.40 | 4.90 | 230 | 30 | 10.28 | 33.38 | 5.02 | 25.66 | 234 | 0.08 |
| 50 | 9.36 | 33.49 | 4.06 | 211 | 50 | 9.36 | 33.49 | 4.06 | 25.90 | 211 | 0.12 |
| 64 | 8.94 | 33.68 | 3.34 | 191 | 75 | 9.23 | 33.79 | 2.78 | 26.16 | 187 | 0.17 |
| 78 | 9.25 | 33.80 | 2.70 | 186 | 100 | 8.97 | 33.92 | 2.28 | 26.30 | 173 | 0.22 |
| 100 | 8.97 | 33.92 | 2.28 | 173 | 150 | 8.56 | 33.96 | 1.86 | 26.39 | 164 | 0.30 |
| 148 | 8.58 | 33.96 | 1.87 | 164 | 200 | 8.22 | 34.09 | 1.62 | 26.55 | 150 | 0.38 |
| 196 | 8.24 | 34.08 | 1.66 | 151 | 250 | 7.95 | 34.14 | 1.40 | 26.63 | 142 | 0.46 |
| 247 | 7.96 | 34.14 | 1.41 | 142 | 300 | 7.61 | 34.15 | 1.25 | 26.68 | 137 | 0.53 |
| 291 | 7.68 | 34.14 | 1.28 | 138 | 400 | 6.78 | 34.23 | 0.89 | 26.86 | 120 | 0.66 |
| 392 | 6.82 | 34.23 | 0.91 | 120 | 500 | 6.12 | 34.23 | 0.57 | 26.95 | 111 | 0.78 |
| 494 | 6.15 | 34.23 | 0.58 | 112 | 600 | 5.56 | 34.28 | 0.37 | 27.06 | 101 | 0.90 |
| 601 | 5.56 | 34.28 | 0.36 | 101 | | | | | | | |

BLACK DOUGLAS; August 18, 1952; 1031 GCT; 36°19'N, 123°09'W; sounding, 1740 fm; wind, 320°, force 7; weather, clear; sea, high; wire angle, 19°. 67.65

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.96 | 32.88 | 6.22 | 337 | 0 | 13.96 | 32.88 | 6.22 | 24.58 | 337 | 0.00 |
| 9 | 13.98 | 32.90 | 6.21 | 336 | 10 | 13.98 | 32.90 | 6.21 | 24.59 | 336 | 0.03 |
| 23 | 13.98 | 32.90 | 6.32 | 336 | 20 | 13.98 | 32.90 | 6.30 | 24.59 | 336 | 0.07 |
| 47 | 12.20 | 32.75 | 6.20 | 313 | 30 | 13.98 | 32.90 | 6.30 | 24.59 | 336 | 0.10 |
| 70 | 10.36 | 32.75 | 5.88 | 282 | 50 | 11.60 | 32.75 | 6.17 | 24.94 | 303 | 0.16 |
| 94 | 9.45 | 32.90 | 5.49 | 256 | 75 | 10.02 | 32.76 | 5.79 | 25.22 | 275 | 0.24 |
| 143 | 8.58 | 33.64 | 3.65 | 188 | 100 | 9.32 | 33.14 | 5.10 | 25.63 | 236 | 0.30 |
| 186 | 7.74 | 33.84 | 3.44 | 161 | 150 | 8.47 | 33.67 | 3.61 | 26.18 | 184 | 0.41 |
| 271 | 7.24 | 34.04 | 1.85 | 140 | 200 | 7.68 | 33.91 | 3.11 | 26.49 | 155 | 0.49 |
| 361 | 6.14 | 34.04 | 1.51 | 126 | 250 | 7.42 | 34.03 | 2.06 | 26.62 | 143 | 0.57 |
| 447 | 5.40 | 34.11 | 0.96 | 112 | 300 | 6.83 | 34.04 | 1.75 | 26.71 | 134 | 0.64 |
| 537 | 4.94 | 34.13 | 0.63 | 105 | 400 | 5.77 | 34.06 | 1.25 | 26.86 | 120 | 0.77 |
| 716 | 4.49 | 34.31 | 0.39 | 87 | 500 | 5.07 | 34.12 | 0.75 | 26.99 | 107 | 0.89 |
| 899 | 3.92 | 34.42 | 0.41 | 73 | 600 | 4.83 | 34.18 | 0.50 | 27.07 | 100 | 1.00 |
| 1095 | 3.52 | 34.45 | 0.61 | 67 | 700 | 4.53 | 34.29 | 0.40 | 27.19 | 89 | 1.10 |
| | | | | | 800 | 4.19 | 34.38 | 0.40 | 27.30 | 79 | 1.20 |
| | | | | | 1000 | 3.70 | 34.44 | 0.52 | 27.39 | 69 | 1.36 |

BLACK DOUGLAS; August 16, 1952; 1022 GCT; 36°10.5'N, 121°45.5'W; sounding, 200 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 03°. 70.51

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.10 | 33.61 | 5.17 | 230 | 0 | 11.10 | 33.61 | 5.17 | 25.70 | 230 | 0.00 |
| 10 | 10.48 | 33.64 | 4.68 | 218 | 10 | 10.48 | 33.64 | 4.68 | 25.83 | 218 | 0.02 |
| 25 | 9.90 | 33.71 | 3.79 | 203 | 20 | 10.02 | 33.70 | 4.00 | 25.95 | 206 | 0.04 |
| 50 | 9.04 | 33.71 | 3.13 | 190 | 30 | 9.80 | 33.71 | 3.65 | 26.00 | 202 | 0.06 |
| 75 | 9.07 | 33.89 | 2.47 | 177 | 50 | 9.04 | 33.71 | 3.13 | 26.12 | 190 | 0.10 |
| 99 | 9.07 | 33.93 | 2.14 | 174 | 75 | 9.07 | 33.89 | 2.47 | 26.26 | 177 | 0.15 |
| 151 | 8.90 | 33.95 | 2.13 | 170 | 100 | 9.07 | 33.93 | 2.14 | 26.29 | 174 | 0.19 |
| 196 | 8.60 | 34.05 | 1.74 | 158 | 150 | 8.92 | 33.95 | 2.14 | 26.33 | 170 | 0.28 |
| 244 | 8.40 | 34.07 | 1.58 | 154 | 200 | 8.59 | 34.05 | 1.73 | 26.46 | 158 | 0.36 |
| 294 | 7.87 | 34.14 | 1.46 | 141 | 250 | 8.35 | 34.07 | 1.57 | 26.51 | 153 | 0.44 |
| | | | | | 300 | (7.79) | (34.15) | (1.44) | (26.66) | (139) | (0.52) |

SIO

CCOFI
5208

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

70.60 BLACK DOUGLAS; August 17, 1952; 0716 GCT; 35°53'N, 122°23'W; sounding, 1500 fm; wind, 320°, force 6; weather, clear; sea, rough; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.35 | 33.22 | 6.03 | 340 | 0 | 15.35 | 33.22 | 6.03 | 24.55 | 340 | 0.00 |
| 10 | 15.36 | 33.22 | 5.93 | 340 | 10 | 15.36 | 33.22 | 5.93 | 24.54 | 340 | 0.03 |
| 24 | 15.34 | 33.22 | 6.07 | 340 | 20 | 15.35 | 33.22 | 6.05 | 24.55 | 340 | 0.07 |
| 53 | 10.86 | 33.37 | 5.29 | 244 | 30 | 15.32 | 33.23 | 6.00 | 24.56 | 339 | 0.10 |
| 76 | 9.66 | 33.44 | 4.46 | 219 | 50 | 11.97 | 33.35 | 5.38 | 25.33 | 265 | 0.16 |
| 104 | 9.46 | 33.73 | 3.31 | 195 | 75 | 9.67 | 33.44 | 4.47 | 25.81 | 220 | 0.22 |
| 153 | 8.35 | 33.95 | 2.49 | 162 | 100 | 9.48 | 33.69 | 3.45 | 26.04 | 198 | 0.28 |
| 203 | 7.71 | 33.96 | 2.09 | 152 | 150 | 8.50 | 33.95 | 2.50 | 26.40 | 164 | 0.37 |
| 304 | 7.26 | 34.20 | 1.05 | 128 | 200 | 7.73 | 33.96 | 2.12 | 26.52 | 152 | 0.45 |
| 408 | 6.53 | 34.18 | 0.97 | 120 | 250 | 7.50 | 34.08 | 1.55 | 26.65 | 140 | 0.52 |
| 507 | 5.90 | 34.23 | 0.51 | 109 | 300 | 7.29 | 34.20 | 1.08 | 26.77 | 129 | 0.59 |
| 607 | 5.40 | 34.33 | 0.39 | 95 | 400 | 6.58 | 34.18 | 0.98 | 26.85 | 121 | 0.72 |
| 804 | 4.42 | 34.40 | 0.37 | 80 | 500 | 5.93 | 34.23 | 0.53 | 26.97 | 109 | 0.84 |
| 1004 | 3.84 | 34.47 | 0.50 | 68 | 600 | 5.43 | 34.32 | 0.40 | 27.11 | 96 | 0.95 |
| 1203 | 3.42 | 34.52 | 0.72 | 61 | 700 | 4.89 | 34.37 | 0.38 | 27.21 | 87 | 1.05 |
| | | | | | 800 | 4.44 | 34.40 | 0.39 | 27.28 | 80 | 1.14 |
| | | | | | 1000 | 3.86 | 34.46 | 0.49 | 27.39 | 69 | 1.31 |

70.70 BLACK DOUGLAS; August 17, 1952; 1350 GCT; 35°33'N, 123°06'W; sounding, 2060 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 24°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.45 | 33.17 | 5.81 | 346 | 0 | 15.45 | 33.17 | 5.81 | 24.48 | 346 | 0.00 |
| 9 | 15.46 | 33.17 | 5.85 | 346 | 10 | 15.46 | 33.17 | 5.85 | 24.48 | 346 | 0.03 |
| 18 | 14.98 | 33.15 | 5.87 | 337 | 20 | 14.16 | 33.14 | 5.90 | 24.74 | 322 | 0.07 |
| 32 | 12.38 | 33.06 | 6.03 | 294 | 30 | 12.62 | 33.08 | 6.03 | 25.00 | 296 | 0.10 |
| 50 | 10.08 | 32.90 | 5.77 | 266 | 50 | 10.08 | 32.90 | 5.77 | 25.32 | 266 | 0.16 |
| 63 | 9.19 | 33.08 | 5.21 | 239 | 75 | 9.88 | 33.45 | 4.50 | 25.78 | 222 | 0.22 |
| 76 | 9.90 | 33.44 | 4.34 | 223 | 100 | 9.29 | 33.65 | 3.32 | 26.04 | 198 | 0.27 |
| 98 | 9.31 | 33.64 | 3.36 | 199 | 150 | 8.20 | 33.93 | 2.63 | 26.43 | 161 | 0.36 |
| 141 | 8.26 | 33.87 | 2.83 | 167 | 200 | 7.99 | 34.11 | 1.79 | 26.60 | 145 | 0.44 |
| 183 | 8.04 | 34.07 | 1.94 | 149 | 250 | 7.62 | 34.09 | 1.62 | 26.64 | 141 | 0.51 |
| 231 | 7.82 | 34.13 | 1.60 | 141 | 300 | 6.90 | 34.07 | 1.58 | 26.72 | 133 | 0.58 |
| 271 | 7.18 | 34.05 | 1.71 | 138 | 400 | 6.37 | 34.20 | 0.72 | 26.89 | 117 | 0.71 |
| 365 | 6.54 | 34.16 | 0.87 | 122 | 500 | 5.72 | 34.23 | 0.52 | 27.00 | 107 | 0.83 |
| 460 | 6.00 | 34.23 | 0.56 | 110 | | | | | | | |
| 560 | 5.24 | 34.23 | 0.49 | 101 | | | | | | | |

70.80 BLACK DOUGLAS; August 17, 1952; 1936 GCT; 35°13'N, 123°48'W; sounding, 2220 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 40°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.40 | 32.92 | 6.21 | 342 | 0 | 14.40 | 32.92 | 6.21 | 24.52 | 342 | 0.00 |
| 8 | 14.38 | 32.92 | - | 342 | 10 | 14.35 | 32.92 | | 24.53 | 341 | 0.03 |
| 23 | 14.22 | 32.90 | 6.18 | 340 | 20 | 14.28 | 32.91 | 6.18 | 24.54 | 341 | 0.07 |
| 46 | 11.33 | 32.77 | 6.15 | 296 | 30 | 14.03 | 32.86 | 6.17 | 24.55 | 340 | 0.10 |
| 68 | 10.23 | 32.77 | 6.01 | 278 | 50 | 11.00 | 32.77 | 6.13 | 25.06 | 291 | 0.17 |
| 88 | 9.67 | 33.08 | 5.18 | 246 | 75 | 10.02 | 32.82 | 5.70 | 25.27 | 271 | 0.24 |
| 130 | 8.48 | 33.49 | 4.03 | 198 | 100 | 9.26 | 33.22 | 4.81 | 25.71 | 230 | 0.30 |
| 171 | 7.96 | 33.80 | 3.23 | 167 | 150 | 8.14 | 33.63 | 3.68 | 26.20 | 183 | 0.40 |

73.50 BLACK DOUGLAS; August 15, 1952; 1943 GCT; 35°37'N, 121°16.5'W; sounding, 47 fm; wind, 320°, force 1; weather, overcast; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.27 | 33.39 | 5.21 | 250 | 0 | 11.27 | 33.39 | 5.21 | 25.49 | 250 | 0.00 |
| 10 | 11.06 | 33.39 | 5.19 | 246 | 10 | 11.06 | 33.39 | 5.19 | 25.53 | 246 | 0.02 |
| 20 | 11.02 | 33.39 | 5.13 | 245 | 20 | 11.02 | 33.39 | 5.13 | 25.54 | 245 | 0.05 |
| 30 | 10.71 | 33.53 | 4.53 | 230 | 30 | 10.71 | 33.53 | 4.53 | 25.70 | 230 | 0.07 |
| 49 | 10.34 | 33.58 | 4.11 | 220 | 50 | 10.34 | 33.58 | 4.09 | 25.81 | 220 | 0.12 |
| 73 | 10.16 | 33.66 | 3.56 | 211 | 75 | (10.15) | (33.66) | (3.52) | (25.90) | (211) | (0.17) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

BLACK DOUGLAS; August 16, 1952; 0147 GCT; 35°18'N, 121°58.5'W; sounding, 1340 fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 05°. 73.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.45 | 33.26 | 6.11 | 299 | 0 | 13.45 | 33.26 | 6.11 | 24.98 | 299 | 0.00 |
| 10 | 13.44 | 33.26 | 6.15 | 299 | 10 | 13.44 | 33.26 | 6.15 | 24.98 | 299 | 0.03 |
| 25 | 13.02 | 33.28 | 5.94 | 289 | 20 | 13.26 | 33.27 | 5.98 | 25.02 | 295 | 0.06 |
| 40 | 12.37 | 33.37 | 5.93 | 271 | 30 | 12.50 | 33.29 | 5.94 | 25.19 | 279 | 0.09 |
| 60 | 11.16 | 33.44 | 4.88 | 244 | 50 | 11.98 | 33.41 | 5.43 | 25.38 | 261 | 0.14 |
| 74 | 10.19 | 33.48 | 4.40 | 225 | 75 | 10.18 | 33.49 | 4.32 | 25.76 | 224 | 0.20 |
| 94 | 9.54 | 33.68 | 3.26 | 200 | 100 | 9.43 | 33.76 | 3.09 | 26.10 | 192 | 0.26 |
| 119 | 9.04 | 33.86 | 2.79 | 179 | 150 | 8.46 | 33.92 | 2.68 | 26.38 | 166 | 0.35 |
| 175 | 8.02 | 33.96 | 2.60 | 156 | 200 | 8.02 | 34.06 | 2.10 | 26.55 | 149 | 0.43 |
| 231 | 8.02 | 34.14 | 1.58 | 143 | 250 | 7.88 | 34.11 | 1.60 | 26.61 | 143 | 0.50 |
| 286 | 6.88 | 34.07 | 1.67 | 133 | 300 | 6.83 | 34.10 | 1.60 | 26.75 | 130 | 0.57 |
| 341 | 6.78 | 34.18 | 0.92 | 123 | 400 | 6.32 | 34.22 | 0.73 | 26.92 | 115 | 0.70 |
| 449 | 5.96 | 34.23 | 0.60 | 109 | 500 | 5.69 | 34.24 | 0.50 | 27.01 | 105 | 0.82 |
| 565 | 5.44 | 34.25 | 0.41 | 102 | 600 | 5.31 | 34.27 | 0.38 | 27.08 | 99 | 0.92 |
| 679 | 5.04 | 34.32 | 0.34 | 92 | | | | | | | |

BLACK DOUGLAS; August 15, 1952; 1436 GCT; 35°04.5'N, 120°52'W; sounding, 85 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 00°. 77.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.25 | 33.58 | 4.63 | 235 | 0 | 11.25 | 33.58 | 4.63 | 25.65 | 235 | 0.00 |
| 10 | 11.08 | 33.58 | 4.89 | 232 | 10 | 11.08 | 33.58 | 4.89 | 25.68 | 232 | 0.02 |
| 20 | 10.99 | 33.60 | 4.64 | 229 | 20 | 10.99 | 33.60 | 4.64 | 25.71 | 229 | 0.05 |
| 30 | 10.94 | 33.60 | 4.38 | 228 | 30 | 10.94 | 33.60 | 4.38 | 25.72 | 228 | 0.07 |
| 50 | 10.81 | 33.60 | 4.12 | 226 | 50 | 10.81 | 33.60 | 4.12 | 25.74 | 226 | 0.12 |
| 75 | 10.05 | 33.75 | 2.99 | 203 | 75 | 10.05 | 33.75 | 2.99 | 25.99 | 203 | 0.17 |

BLACK DOUGLAS; August 15, 1952; 1012 GCT; 34°54.5'N, 121°13'W; sounding, 324 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 09°. 77.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.83 | 33.35 | 6.01 | 281 | 0 | 12.83 | 33.35 | 6.01 | 25.17 | 281 | 0.00 |
| 10 | 12.82 | 33.35 | 6.05 | 280 | 10 | 12.82 | 33.35 | 6.05 | 25.17 | 280 | 0.03 |
| 25 | 12.13 | 33.44 | 5.67 | 261 | 20 | 12.60 | 33.40 | 5.94 | 25.25 | 273 | 0.06 |
| 49 | 10.37 | 33.47 | 4.38 | 229 | 30 | 11.70 | 33.45 | 5.50 | 25.46 | 253 | 0.08 |
| 74 | 9.58 | 33.73 | 2.87 | 197 | 50 | 10.32 | 33.48 | 4.27 | 25.73 | 227 | 0.13 |
| 98 | 9.12 | 33.89 | 2.61 | 178 | 75 | 9.55 | 33.74 | 2.84 | 26.06 | 195 | 0.18 |
| 149 | 8.86 | 34.04 | 2.14 | 163 | 100 | 9.09 | 33.90 | 2.58 | 26.26 | 177 | 0.23 |
| 194 | 8.64 | 34.11 | 1.64 | 154 | 150 | 8.85 | 34.04 | 2.12 | 26.41 | 163 | 0.32 |
| 238 | 8.34 | 34.18 | 1.41 | 145 | 200 | 8.60 | 34.12 | 1.60 | 26.51 | 153 | 0.40 |
| 285 | 8.11 | 34.22 | 1.14 | 138 | 250 | 8.29 | 34.20 | 1.32 | 26.62 | 142 | 0.47 |
| 336 | 7.36 | 34.18 | 1.19 | 131 | 300 | 7.90 | 34.21 | 1.15 | 26.69 | 136 | 0.54 |
| 384 | 7.00 | 34.25 | 0.94 | 121 | 400 | 6.90 | 34.25 | 0.84 | 26.86 | 120 | 0.68 |
| 434 | 6.70 | 34.23 | 0.67 | 119 | | | | | | | |

BLACK DOUGLAS; August 15, 1952; 0150 GCT; 34°34'N, 121°55'W; sounding, 2050 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 37°. 77.65

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.98 | 33.46 | 6.01 | 275 | 0 | 12.98 | 33.46 | 6.01 | 25.23 | 275 | 0.00 |
| 8 | 12.98 | 33.46 | 6.15 | 275 | 10 | 12.98 | 33.46 | 6.14 | 25.23 | 275 | 0.03 |
| 20 | 13.00 | 33.44 | 6.02 | 277 | 20 | 13.00 | 33.44 | 6.02 | 25.21 | 277 | 0.06 |
| 32 | 12.96 | 33.55 | 6.09 | 268 | 30 | 12.98 | 33.50 | 6.08 | 25.26 | 272 | 0.08 |
| 48 | 9.83 | 33.66 | 3.82 | 206 | 50 | 9.68 | 33.67 | 3.60 | 25.99 | 203 | 0.13 |
| 58 | 9.07 | 33.71 | 3.31 | 190 | 75 | 8.80 | 33.82 | 2.85 | 26.25 | 178 | 0.18 |
| 70 | 8.79 | 33.78 | 3.19 | 181 | 100 | 8.72 | 33.93 | 2.31 | 26.35 | 169 | 0.22 |
| 86 | 8.81 | 33.89 | 2.47 | 173 | 150 | 8.04 | 33.99 | 2.08 | 26.50 | 154 | 0.30 |
| 123 | 8.33 | 33.96 | 2.22 | 161 | 200 | 7.57 | 34.05 | 1.75 | 26.61 | 143 | 0.38 |
| 159 | 7.95 | 34.00 | 2.03 | 152 | | | | | | | |
| 197 | 7.61 | 34.05 | 1.79 | 144 | | | | | | | |
| 237 | 7.20 | 34.05 | 1.47 | 138 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

80.51 BLACK DOUGLAS; August 12, 1952; 1612 GCT; 34°26.5'N, 120°32.5'W; sounding, 50 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.71 | 33.55 | | 264 | 0 | 12.71 | 33.55 | | 25.35 | 264 | 0.00 |
| 10 | 12.71 | 33.57 | | 262 | 10 | 12.71 | 33.57 | | 25.36 | 262 | 0.03 |
| 20 | 12.64 | 33.57 | | 261 | 20 | 12.64 | 33.57 | | 25.38 | 261 | 0.05 |
| 30 | 11.62 | 33.58 | | 242 | 30 | 11.62 | 33.58 | | 25.58 | 242 | 0.08 |
| 50 | 11.44 | 33.62 | | 236 | 50 | 11.44 | 33.62 | | 25.64 | 236 | 0.13 |
| 75 | 10.62 | 33.62 | | 222 | 75 | 10.62 | 33.62 | | 25.79 | 222 | 0.18 |

80.55 BLACK DOUGLAS; August 12, 1952; 1858 GCT; 34°19'N, 120°48'W; sounding, 430 fm; wind, 300°, force 4; weather, cloudy; sea, moderate; wire angle, 24°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.25 | 33.58 | 5.80 | 272 | 0 | 13.25 | 33.58 | 5.80 | 25.26 | 272 | 0.00 |
| 9 | 13.34 | 33.58 | 5.72 | 273 | 10 | 13.33 | 33.58 | 5.74 | 25.25 | 273 | 0.03 |
| 18 | 13.04 | 33.60 | 5.77 | 266 | 20 | 12.96 | 33.60 | 5.75 | 25.34 | 265 | 0.05 |
| 32 | 12.23 | 33.60 | 5.16 | 251 | 30 | 12.43 | 33.60 | 5.30 | 25.44 | 255 | 0.08 |
| 50 | 9.80 | 33.68 | 3.39 | 204 | 50 | 9.80 | 33.68 | 3.39 | 25.98 | 204 | 0.13 |
| 64 | 9.40 | 33.78 | 2.90 | 190 | 75 | 9.20 | 33.85 | 2.84 | 26.21 | 182 | 0.17 |
| 77 | 9.26 | 33.86 | 2.82 | 182 | 100 | 9.03 | 34.04 | 2.18 | 26.38 | 165 | 0.22 |
| 99 | 9.04 | 34.04 | 2.20 | 165 | 150 | 8.89 | 34.11 | 1.86 | 26.46 | 158 | 0.30 |
| 147 | 8.90 | 34.11 | 1.90 | 158 | 200 | 8.52 | 34.17 | 1.37 | 26.56 | 148 | 0.38 |
| 194 | 8.53 | 34.16 | 1.39 | 149 | 250 | 8.32 | 34.20 | 1.22 | 26.62 | 143 | 0.45 |
| 246 | 8.34 | 34.20 | 1.23 | 143 | 300 | 8.08 | 34.25 | 1.11 | 26.69 | 136 | 0.53 |
| 290 | 8.12 | 34.25 | 1.15 | 136 | 400 | 7.32 | 34.25 | 0.86 | 26.80 | 125 | 0.66 |
| 396 | 7.38 | 34.25 | 0.87 | 126 | 500 | 5.97 | 34.14 | 0.82 | 26.90 | 116 | 0.79 |
| 499 | 5.98 | 34.14 | 0.82 | 116 | 600 | 5.69 | 34.31 | 0.44 | 27.07 | 100 | 0.90 |
| 608 | 5.68 | 34.33 | 0.41 | 99 | | | | | | | |

80.60 BLACK DOUGLAS; August 12, 1952; 2307, 2332 GCT; 34°09'N, 121°09'W; sounding, 1250 fm; wind, 310°, force 5; weather, overcast; sea, rough; wire angle, 35°, 40°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.28 | 33.28 | 5.24 | 334 | 0 | 15.28 | 33.28 | 5.24 | 24.61 | 334 | 0.00 |
| 8 | 15.30 | 33.26 | 5.89 | 336 | 10 | 15.29 | 33.25 | 5.98 | 24.58 | 337 | 0.03 |
| 20 | 14.52 | 33.21 | 6.20 | 324 | 20 | 14.52 | 33.21 | 6.20 | 24.72 | 324 | 0.07 |
| 45 | 11.96 | 33.08 | 6.02 | 285 | 30 | 13.30 | 33.15 | 6.16 | 24.92 | 304 | 0.10 |
| | | | | | 50 | 10.02 | 33.06 | 5.80 | 25.46 | 253 | 0.15 |
| 55 | 9.64 | 33.06 | 5.31 | 247 | 75 | 9.48 | 33.40 | 4.25 | 25.81 | 220 | 0.21 |
| 76 | 9.47 | 33.40 | 4.23 | 219 | 100 | 9.40 | 33.64 | 3.34 | 26.01 | 201 | 0.27 |
| 114 | 8.98 | 33.75 | 3.03 | 186 | 150 | 8.44 | 33.95 | | 26.40 | 163 | 0.36 |
| 132 | 8.67 | 33.86 | 2.74 | 173 | 200 | 8.08 | 34.04 | 2.07 | 26.53 | 151 | 0.44 |
| 152 | 8.41 | 33.96 | - | 162 | 250 | 7.61 | 34.07 | 1.87 | 26.62 | 143 | 0.51 |
| 200 | 8.08 | 34.04 | 2.07 | 151 | 300 | 6.72 | 34.07 | 1.65 | 26.75 | 131 | 0.58 |
| 269 | 7.22 | 34.07 | 1.80 | 137 | 400 | 6.19 | 34.22 | 0.86 | 26.93 | 113 | 0.71 |
| 335 | 6.41 | 34.09 | 1.45 | 125 | 500 | 5.91 | 34.26 | 0.59 | 27.00 | 107 | 0.83 |
| 402 | 6.18 | 34.22 | 0.85 | 113 | 600 | 5.58 | 34.30 | 0.39 | 27.07 | 100 | 0.94 |
| 534 | 5.81 | 34.27 | 0.50 | 105 | 700 | 5.22 | 34.35 | 0.32 | 27.16 | 92 | 1.04 |
| 683 | 5.28 | 34.34 | 0.32 | 93 | 800 | 4.73 | 34.40 | 0.35 | 27.25 | 83 | 1.14 |
| 850 | 4.48 | 34.42 | 0.39 | 79 | | | | | | | |

80.70 BLACK DOUGLAS; August 13, 1952; 0720 GCT; 33°49'N, 121°51'W; sounding, 2020 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 31°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.93 | 32.88 | 5.71 | 377 | 0 | 15.93 | 32.88 | 5.71 | 24.16 | 377 | 0.00 |
| 8 | 15.96 | 32.88 | 5.74 | 378 | 10 | 15.95 | 32.88 | 5.75 | 24.15 | 378 | 0.04 |
| 22 | 15.91 | 32.88 | 5.77 | 377 | 20 | 15.92 | 32.88 | 5.77 | 24.16 | 377 | 0.08 |
| 34 | 13.99 | 32.88 | 6.31 | 337 | 30 | 14.70 | 32.88 | 6.28 | 24.42 | 351 | 0.11 |
| 51 | 11.66 | 32.84 | 6.17 | 297 | 50 | 11.75 | 32.84 | 6.20 | 24.98 | 298 | 0.18 |
| 63 | 10.79 | 32.83 | 5.92 | 283 | 75 | 10.35 | 32.89 | 5.78 | 25.27 | 271 | 0.25 |
| 80 | 10.20 | 32.92 | 5.72 | 266 | 100 | 9.44 | 33.11 | 5.00 | 25.59 | 240 | 0.31 |
| 99 | 9.46 | 33.10 | 5.07 | 242 | 150 | 8.70 | 33.75 | 3.11 | 26.21 | 182 | 0.42 |
| 144 | 8.76 | 33.73 | 3.22 | 184 | 200 | 8.14 | 33.94 | 2.30 | 26.44 | 160 | 0.51 |
| 186 | 8.26 | 33.89 | 2.51 | 165 | 250 | 7.70 | 34.02 | 1.93 | 26.57 | 147 | 0.59 |
| 230 | 7.90 | 34.00 | 1.99 | 152 | 300 | 7.20 | 34.06 | 1.65 | 26.67 | 138 | 0.66 |
| 274 | 7.38 | 34.04 | 1.83 | 142 | 400 | 6.52 | 34.14 | 1.00 | 26.83 | 123 | 0.79 |
| 365 | 6.84 | 34.14 | 1.10 | 127 | 500 | 5.62 | 34.16 | 0.67 | 26.96 | 111 | 0.92 |
| 466 | 5.82 | 34.14 | 0.79 | 114 | | | | | | | |
| 566 | 5.42 | 34.25 | 0.42 | 102 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; August 13, 1952; 1357 GCT; 33°29'N, 122°32'W; sounding, 2100 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 15°. | | | | | | | | | | | 80.80 |
| 0 | 15.71 | 32.99 | 5.80 | 364 | 0 | 15.71 | 32.99 | 5.80 | 24.29 | 364 | 0.00 |
| 9 | 15.72 | 32.97 | 5.67 | 366 | 10 | 15.72 | 32.97 | 5.68 | 24.27 | 366 | 0.04 |
| 29 | 15.71 | 32.97 | 5.81 | 366 | 20 | 15.72 | 32.97 | 5.70 | 24.27 | 366 | 0.07 |
| 58 | 11.62 | 32.87 | 6.10 | 294 | 30 | 15.70 | 32.97 | 5.82 | 24.28 | 366 | 0.11 |
| 86 | 9.92 | 32.92 | 5.49 | 262 | 50 | 12.70 | 32.89 | 6.07 | 24.84 | 312 | 0.18 |
| 114 | 9.15 | 33.30 | 4.57 | 222 | 75 | 10.34 | 32.89 | 5.80 | 25.27 | 271 | 0.25 |
| 167 | 8.46 | 33.77 | 3.15 | 177 | 100 | 9.47 | 33.06 | 5.00 | 25.55 | 245 | 0.32 |
| 221 | 8.12 | 33.89 | 2.35 | 163 | 150 | 8.62 | 33.63 | 3.55 | 26.13 | 190 | 0.43 |
| 329 | 7.12 | 34.11 | 1.53 | 133 | 200 | 8.29 | 33.84 | 2.57 | 26.34 | 169 | 0.52 |
| 434 | 6.26 | 34.18 | 0.83 | 117 | 250 | 7.89 | 33.97 | 2.14 | 26.50 | 154 | 0.60 |
| 542 | 5.60 | 34.24 | 0.45 | 104 | 300 | 7.42 | 34.07 | 1.78 | 26.65 | 140 | 0.68 |
| 648 | 5.04 | 34.33 | 0.31 | 91 | 400 | 6.53 | 34.16 | 1.00 | 26.84 | 122 | 0.81 |
| 862 | 4.22 | 34.40 | 0.41 | 77 | 500 | 5.83 | 34.21 | 0.57 | 26.97 | 109 | 0.93 |
| 1075 | 3.60 | 34.49 | 0.61 | 65 | 600 | 5.28 | 34.30 | 0.36 | 27.11 | 96 | 1.04 |
| 1285 | 3.13 | 34.51 | 0.92 | 59 | 700 | 4.82 | 34.35 | 0.31 | 27.20 | 87 | 1.14 |
| | | | | | 800 | 4.42 | 34.37 | 0.35 | 27.26 | 82 | 1.23 |
| | | | | | 1000 | 3.80 | 34.46 | 0.53 | 27.40 | 69 | 1.40 |
| BLACK DOUGLAS; August 13, 1952; 2210 GCT; 33°09'N, 123°12'W; sounding, 2320 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 26°. | | | | | | | | | | | 80.90 |
| 0 | 17.16 | 33.12 | | 387 | 0 | 17.16 | 33.12 | | 24.06 | 387 | 0.00 |
| 8 | 17.16 | 33.15 | | 384 | 10 | 17.16 | 33.15 | | 24.08 | 384 | 0.04 |
| 18 | 17.17 | 33.12 | | 387 | 20 | 17.16 | 33.12 | | 24.06 | 387 | 0.08 |
| 32 | 17.15 | 33.15 | | 384 | 30 | 17.15 | 33.15 | | 24.08 | 384 | 0.12 |
| 50 | 14.30 | 33.13 | | 325 | 50 | 14.30 | 33.13 | | 24.70 | 325 | 0.19 |
| 63 | 13.64 | 33.08 | | 316 | 75 | 13.10 | 33.04 | | 24.88 | 308 | 0.27 |
| 76 | 13.04 | 33.04 | | 307 | 100 | 11.92 | 33.09 | | 25.14 | 283 | 0.34 |
| 97 | 12.09 | 33.08 | | 287 | 150 | 9.03 | 33.29 | | 25.80 | 221 | 0.47 |
| 142 | 9.34 | 33.24 | | 229 | 200 | 8.38 | 33.78 | | 26.28 | 175 | 0.57 |
| 185 | 8.49 | 33.66 | | 185 | 250 | 8.10 | 34.02 | | 26.51 | 153 | 0.65 |
| 233 | 8.25 | 33.96 | | 160 | 300 | 7.62 | 34.09 | | 26.64 | 141 | 0.73 |
| 274 | 7.82 | 34.07 | | 145 | 400 | 6.46 | 34.12 | | 26.82 | 124 | 0.87 |
| 372 | 6.88 | 34.11 | | 130 | 500 | 5.62 | 34.16 | | 26.96 | 111 | 0.99 |
| 469 | 5.80 | 34.14 | | 114 | | | | | | | |
| 573 | 5.26 | 34.23 | | 101 | | | | | | | |
| BLACK DOUGLAS; August 14, 1952; 0430 GCT; 32°49'N, 123°54'W; sounding, 2240 fm; wind, 350°, force 5; weather, overcast; sea, rough; wire angle, 28°. | | | | | | | | | | | 80.100 |
| 0 | 17.25 | 33.15 | 5.42 | 386 | 0 | 17.25 | 33.15 | 5.42 | 24.06 | 386 | 0.00 |
| 8 | 17.28 | 33.15 | 5.56 | 387 | 10 | 17.28 | 33.15 | 5.58 | 24.05 | 387 | 0.04 |
| 26 | 17.28 | 33.15 | 5.59 | 387 | 20 | 17.28 | 33.15 | 5.59 | 24.05 | 387 | 0.08 |
| 52 | 14.22 | 33.15 | 6.06 | 322 | 30 | 17.27 | 33.15 | 5.67 | 24.05 | 387 | 0.12 |
| 78 | 12.90 | 33.10 | 6.03 | 300 | 50 | 14.40 | 33.15 | 6.05 | 24.70 | 326 | 0.19 |
| 104 | 11.73 | 33.08 | 5.76 | 280 | 75 | 12.99 | 33.11 | 6.03 | 24.95 | 301 | 0.27 |
| 155 | 9.02 | 33.51 | 4.32 | 204 | 100 | 12.10 | 33.08 | 5.82 | 25.10 | 287 | 0.34 |
| 206 | 8.33 | 33.78 | 3.61 | 174 | 150 | 9.15 | 33.48 | 4.41 | 25.93 | 209 | 0.47 |
| 304 | 7.21 | 34.04 | 2.18 | 139 | 200 | 8.39 | 33.76 | 3.70 | 26.26 | 177 | 0.56 |
| 399 | 6.44 | 34.13 | 1.20 | 123 | 250 | 7.81 | 33.93 | 2.92 | 26.48 | 156 | 0.65 |
| 501 | 5.68 | 34.20 | 0.67 | 108 | 300 | 7.25 | 34.03 | 2.22 | 26.64 | 141 | 0.72 |
| 597 | 5.16 | 34.16 | 1.02 | 105 | 400 | 6.43 | 34.13 | 1.18 | 26.83 | 123 | 0.86 |
| 797 | 4.54 | 34.42 | 0.36 | 79 | 500 | 5.69 | 34.20 | 0.68 | 26.98 | 108 | 0.98 |
| 1000 | 3.84 | 34.45 | 0.57 | 70 | 600 | 5.14 | 34.16 | 1.01 | 27.02 | 105 | 1.10 |
| 1203 | 3.30 | 34.52 | 0.76 | 60 | 700 | 4.81 | 34.28 | 0.64 | 27.15 | 93 | 1.20 |
| | | | | | 800 | 4.53 | 34.42 | 0.37 | 27.29 | 79 | 1.30 |
| | | | | | 1000 | 3.84 | 34.45 | 0.57 | 27.39 | 70 | 1.46 |
| BLACK DOUGLAS; August 12, 1952; 0537 GCT; 34°01'N, 119°02.5'W; sounding, 45 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | 85.38 |
| 0 | 16.62 | 33.37 | 6.36 | 356 | 0 | 16.62 | 33.37 | 6.36 | 24.37 | 356 | 0.00 |
| 10 | 15.60 | 33.35 | 6.11 | 336 | 10 | 15.60 | 33.35 | 6.11 | 24.59 | 336 | 0.03 |
| 20 | 13.22 | 33.30 | 6.33 | 292 | 20 | 13.22 | 33.30 | 6.33 | 25.05 | 292 | 0.07 |
| 30 | 12.25 | 33.37 | 5.77 | 268 | 30 | 12.25 | 33.37 | 5.77 | 25.30 | 268 | 0.09 |
| 50 | 10.08 | 33.35 | 4.24 | 233 | 50 | 10.08 | 33.35 | 4.24 | 25.67 | 233 | 0.14 |

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5208

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| **85.40** | BLACK DOUGLAS; August 12, 1952; 0250 GCT; 33°57'N, 119°10.5'W; sounding, 410 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | 17.67 | 33.42 | 5.92 | 376 | 0 | 17.67 | 33.42 | 5.92 | 24.16 | 376 | 0.00 |
| 10 | 17.34 | 33.42 | 6.16 | 369 | 10 | 17.34 | 33.42 | 6.16 | 24.24 | 369 | 0.04 |
| 19 | 12.11 | 33.33 | 5.82 | 269 | 20 | 11.85 | 33.32 | 5.70 | 25.33 | 265 | 0.07 |
| 34 | 10.60 | 33.31 | 4.50 | 244 | 30 | 10.80 | 33.31 | 4.80 | 25.52 | 248 | 0.09 |
| 54 | 10.10 | 33.46 | 3.81 | 225 | 50 | 10.22 | 33.42 | 4.02 | 25.70 | 230 | 0.14 |
| 68 | 9.75 | 33.58 | 3.51 | 210 | 75 | 9.55 | 33.59 | 3.45 | 25.95 | 207 | 0.20 |
| 83 | 9.43 | 33.60 | 3.33 | 204 | 100 | 9.33 | 33.75 | 2.94 | 26.11 | 191 | 0.25 |
| 106 | 9.30 | 33.80 | 2.78 | 187 | 150 | 9.19 | 34.00 | 2.18 | 26.33 | 171 | 0.34 |
| 157 | 9.18 | 34.02 | 2.12 | 169 | 200 | 8.97 | 34.10 | 2.03 | 26.44 | 160 | 0.42 |
| 206 | 8.94 | 34.11 | 1.99 | 159 | 250 | 8.78 | 34.15 | 1.56 | 26.51 | 153 | 0.50 |
| 260 | 8.72 | 34.16 | 1.47 | 152 | 300 | 8.44 | 34.16 | 1.28 | 26.57 | 148 | 0.58 |
| 305 | 8.39 | 34.16 | 1.24 | 147 | 400 | 7.69 | 34.35 | 0.78 | 26.83 | 123 | 0.72 |
| 411 | 7.60 | 34.36 | 0.71 | 121 | 500 | 6.78 | 34.29 | 0.50 | 26.91 | 115 | 0.85 |
| 516 | 6.63 | 34.29 | 0.47 | 113 | 600 | 5.99 | 34.43 | 0.32 | 27.13 | 95 | 0.96 |
| 624 | 5.84 | 34.49 | 0.30 | 89 | | | | | | | |
| **85.50** | BLACK DOUGLAS; August 11, 1952; 2024 GCT; 33°37'N, 119°52'W; sounding, 160 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 22°. | | | | | | | | | | |
| 0 | 14.50 | 33.62u | 5.71 | | 0 | 14.50 | (33.40) | 5.71 | (24.87) | (309) | (0.00) |
| 9 | 14.50 | 33.40 | 5.59 | 309 | 10 | 14.50 | 33.40 | 5.59 | 24.87 | 309 | 0.03 |
| 23 | 12.62 | 33.51 | 4.94 | 265 | 20 | 13.80 | 33.46 | 5.11 | 25.06 | 291 | 0.06 |
| 46 | 9.64 | 33.77 | 3.39 | 195 | 30 | 9.84 | 33.66 | 4.60 | 25.95 | 206 | 0.09 |
| 69 | 9.46 | 33.69 | 3.22 | 198 | 50 | 9.63 | 33.76 | 3.35 | 26.07 | 195 | 0.13 |
| 91 | 8.99 | 33.87 | 2.48 | 177 | 75 | 9.20 | 33.72 | 2.95 | 26.11 | 192 | 0.17 |
| 113 | 8.94 | 33.93 | 2.39 | 172 | 100 | 8.96 | 33.89 | 2.44 | 26.28 | 175 | 0.22 |
| 141 | 8.88 | 34.02 | 2.15 | 164 | 150 | (8.87) | (34.04) | (2.11) | (26.41) | (163) | (0.31) |
| **85.60** | BLACK DOUGLAS; August 11, 1952; 1229 GCT; 33°13'N, 120°33'W; sounding, 900 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 16°. | | | | | | | | | | |
| 0 | 15.34 | 33.37 | 5.89 | 329 | 0 | 15.34 | 33.37 | 5.89 | 24.66 | 329 | 0.00 |
| 9 | 15.34 | 33.37 | 5.84 | 329 | 10 | 15.34 | 33.37 | 5.84 | 24.66 | 329 | 0.03 |
| 19 | 15.35 | 33.37 | 5.91 | 329 | 20 | 15.34 | 33.37 | 5.91 | 24.66 | 329 | 0.07 |
| 33 | 15.22 | 33.39 | 5.85 | 325 | 30 | 15.30 | 33.39 | 5.86 | 24.69 | 326 | 0.10 |
| 53 | 12.72 | 33.37 | 5.64 | 277 | 50 | 13.14 | 33.37 | 5.69 | 25.12 | 285 | 0.16 |
| 67 | 11.94 | 33.40 | 5.23 | 261 | 75 | 11.25 | 33.38 | 4.90 | 25.49 | 250 | 0.23 |
| 81 | 10.22 | 33.35 | 4.51 | 235 | 100 | 9.11 | 33.59 | 3.62 | 26.02 | 200 | 0.28 |
| 104 | 9.02 | 33.63 | 3.54 | 196 | 150 | 8.56 | 33.80 | 2.82 | 26.27 | 176 | 0.38 |
| 155 | 8.54 | 33.82 | 2.77 | 174 | 200 | 8.12 | 34.07 | 2.43 | 26.55 | 150 | 0.46 |
| 204 | 8.04 | 34.07 | 2.39 | 149 | 250 | 7.48 | 34.05 | 2.02 | 26.62 | 142 | 0.54 |
| 257 | 7.39 | 34.05 | 1.97 | 141 | 300 | 6.75 | 34.09 | 1.66 | 26.76 | 130 | 0.61 |
| 301 | 6.74 | 34.09 | 1.64 | 130 | 400 | 6.07 | 34.11 | 0.96 | 26.86 | 120 | 0.74 |
| 405 | 6.04 | 34.11 | 0.92 | 119 | 500 | 5.62 | 34.28 | 0.49 | 27.05 | 102 | 0.85 |
| 508 | 5.60 | 34.29 | 0.48 | 101 | 600 | 5.27 | 34.33 | 0.33 | 27.13 | 94 | 0.96 |
| 615 | 5.23 | 34.33 | 0.32 | 93 | | | | | | | |
| **90.28** | BLACK DOUGLAS; August 9, 1952; 1735 GCT; 33°28.5'N, 117°46.5'W; sounding, 250 fm; wind, 210°, force 1; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 19.51 | | - | | 0 | 19.51 | | | | | |
| 10 | 16.41 | | - | | 10 | 16.41 | | | | | |
| 20 | 14.58 | | 6.56 | | 20 | 14.58 | | 6.56 | | | |
| 30 | 12.84 | | 6.31 | | 30 | 12.84 | | 6.31 | | | |
| 50 | 10.15 | | 5.64 | | 50 | 10.15 | | 5.64 | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; August 9, 1952; 1925 GCT; 33°24.5'N, 117°55'W; sounding, 300 fm; wind, 240°, force 1; weather, cloudy; sea, slight; wire angle, 04°. | | | | | | | | | | | 90.30 |
| 0 | 20.07 | 33.46 | 5.56 | 431 | 0 | 20.07 | 33.46 | 5.56 | 23.59 | 431 | 0.00 |
| 10 | 17.08 | 33.37 | 6.03 | 367 | 10 | 17.08 | 33.37 | 6.03 | 24.27 | 367 | 0.04 |
| 25 | 13.68 | 33.35 | 6.42 | 297 | 20 | 14.58 | 33.35 | 6.36 | 24.81 | 315 | 0.07 |
| 50 | 10.64 | 33.31 | 4.78 | 245 | 30 | 12.91 | 33.34 | 6.15 | 25.15 | 283 | 0.10 |
| 75 | 10.27 | 33.49 | 4.12 | 225 | 50 | 10.64 | 33.31 | 4.78 | 25.54 | 245 | 0.16 |
| 99 | 9.68 | 33.68 | 3.31 | 202 | 75 | 10.27 | 33.49 | 4.12 | 25.75 | 225 | 0.22 |
| 151 | 9.20 | 33.96 | 2.73 | 174 | 100 | 9.65 | 33.69 | 3.29 | 26.01 | 201 | 0.27 |
| 197 | 8.67 | 34.11 | 2.24 | 155 | 150 | 9.22 | 33.96 | 2.75 | 26.29 | 174 | 0.36 |
| 243 | 8.30 | 34.13 | 1.75 | 148 | 200 | 8.62 | 34.11 | 2.19 | 26.50 | 154 | 0.45 |
| 289 | 8.40 | 34.25 | 1.02 | 140 | 250 | 8.32 | 34.14 | 1.60 | 26.57 | 147 | 0.53 |
| 341 | 8.09 | 34.25 | 0.85 | 136 | 300 | 8.37 | 34.25 | 1.00 | 26.65 | 140 | 0.60 |
| 389 | 7.64 | 34.27 | 0.64 | 128 | 400 | 7.53 | 34.26 | 0.64 | 26.78 | 127 | 0.74 |
| 438 | 7.26 | 34.23 | 0.62 | 126 | 500 | (7.03) | (34.28) | (0.42) | (26.87) | (119) | (0.87) |
| 487 | 7.07 | 34.27 | 0.43 | 120 | | | | | | | |
| BLACK DOUGLAS; August 10, 1952; 0105 GCT; 33°11'N, 118°23.5'W; sounding, 650 fm; wind, 240°, force 3; weather, partly cloudy; sea, moderate; wire angle, 29°. | | | | | | | | | | | 90.37 |
| 0 | 19.69 | 33.53 | 5.57 | 416 | 0 | 19.69 | 33.53 | 5.57 | 23.74 | 416 | 0.00 |
| 9 | 19.35 | 33.46 | 5.64 | 413 | 10 | 19.30 | 33.46 | 5.67 | 23.79 | 412 | 0.04 |
| 23 | 17.36 | 33.46 | 6.06 | 366 | 20 | 18.35 | 33.46 | 5.93 | 24.03 | 389 | 0.08 |
| 44 | 12.44 | 33.48 | 6.69 | 264 | 30 | 15.30 | 33.46 | 6.30 | 24.74 | 321 | 0.12 |
| 65 | 9.72 | 33.62 | 3.39 | 207 | 50 | 10.62 | 33.50 | 6.31 | 25.70 | 230 | 0.17 |
| 86 | 9.32 | 33.80 | 3.02 | 187 | 75 | 9.50 | 33.74 | 3.15 | 26.07 | 195 | 0.23 |
| 133 | 8.82 | 33.95 | 2.58 | 169 | 100 | 9.11 | 33.85 | 2.92 | 26.22 | 181 | 0.27 |
| 174 | 8.77 | 34.11 | 1.80 | 156 | 150 | 8.80 | 34.01 | 2.20 | 26.40 | 164 | 0.36 |
| 257 | 8.36 | 34.23 | 1.25 | 141 | 200 | 8.68 | 34.17 | 1.63 | 26.54 | 150 | 0.44 |
| 344 | 7.67 | 34.27 | 0.71 | 128 | 250 | 8.42 | 34.23 | 1.29 | 26.63 | 142 | 0.52 |
| 428 | 7.15 | 34.29 | 0.50 | 120 | 300 | 7.98 | 34.25 | 0.95 | 26.71 | 134 | 0.59 |
| 518 | 6.40 | 34.29 | 0.51 | 110 | 400 | 7.34 | 34.29 | 0.56 | 26.83 | 122 | 0.72 |
| 606 | 5.82 | 34.31 | - | 102 | 500 | 6.55 | 34.29 | 0.51 | 26.94 | 112 | 0.85 |
| 702 | 5.28 | 34.36 | 0.32 | 92 | 600 | 5.86 | 34.31 | | 27.05 | 102 | 0.96 |
| 890 | 4.53 | 34.42 | 0.35 | 79 | 700 | 5.29 | 34.36 | 0.32 | 27.16 | 92 | 1.07 |
| | | | | | 800 | 4.86 | 34.40 | 0.34 | 27.24 | 84 | 1.16 |
| | | | | | 1000 | (4.27) | (34.43) | | (27.33) | (76) | (1.34) |
| BLACK DOUGLAS; August 10, 1952; 0640 GCT; 32°54.5'N, 118°56'W; sounding, 995 fm; wind, 240°, force 3; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | 90.45 |
| 0 | 17.86 | 33.37 | 5.54 | 384 | 0 | 17.86 | 33.37 | 5.54 | 24.08 | 384 | 0.00 |
| 10 | 17.88 | 33.39 | 5.64 | 383 | 10 | 17.88 | 33.39 | 5.64 | 24.09 | 383 | 0.04 |
| 20 | 17.57 | 33.35 | 5.72 | 379 | 20 | 17.57 | 33.35 | 5.72 | 24.13 | 379 | 0.08 |
| 35 | 12.82 | 33.28 | 5.94 | 285 | 30 | 13.90 | 33.29 | 5.90 | 24.91 | 305 | 0.11 |
| 50 | 11.08 | 33.31 | 4.92 | 252 | 50 | 11.08 | 33.31 | 4.92 | 25.47 | 252 | 0.17 |
| 65 | 9.98 | 33.53 | 3.86 | 218 | 75 | 9.64 | 33.65 | 3.50 | 25.98 | 204 | 0.22 |
| 80 | 9.54 | 33.68 | 3.43 | 200 | 100 | 8.98 | 33.80 | 3.18 | 26.20 | 182 | 0.27 |
| 99 | 8.99 | 33.80 | 3.22 | 182 | 150 | 8.76 | 34.05 | 2.12 | 26.43 | 160 | 0.36 |
| 150 | 8.76 | 34.05 | 2.12 | 160 | 200 | 8.31 | 34.14 | 1.73 | 26.57 | 147 | 0.44 |
| 196 | 8.40 | 34.14 | 1.76 | 148 | 250 | 7.83 | 34.15 | 1.36 | 26.65 | 140 | 0.51 |
| 242 | 7.86 | 34.14 | 1.49 | 141 | 300 | 7.76 | 34.28 | 0.82 | 26.76 | 129 | 0.58 |
| 289 | 7.80 | 34.27 | 0.86 | 130 | 400 | 7.07 | 34.31 | 0.61 | 26.89 | 117 | 0.71 |
| 388 | 7.18 | 34.31 | 0.64 | 119 | 500 | 6.22 | 34.32 | 0.42 | 27.01 | 106 | 0.83 |
| 483 | 6.34 | 34.31 | 0.43 | 108 | 600 | (5.72) | (34.39) | | (27.13) | (95) | (0.94) |
| 587 | 5.77 | 34.38 | 0.41 | 96 | | | | | | | |

SIO

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

90.53 BLACK DOUGLAS; August 10, 1952; 1212 GCT; 32°38.5'N, 119°29'W; sounding, 730 fm; wind, 270°, force 4; weather, overcast; sea, moderate; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.35 | 33.49 | 5.65 | 342 | 0 | 16.35 | 33.49 | 5.65 | 24.53 | 342 | 0.00 |
| 8 | 16.34 | 33.51 | 5.71 | 340 | 10 | 16.33 | 33.51 | 5.71 | 24.55 | 340 | 0.03 |
| 22 | 15.26 | 33.49 | 5.72 | 318 | 20 | 15.75 | 33.49 | 5.72 | 24.66 | 329 | 0.07 |
| 48 | 10.25 | 33.49 | 4.19 | 225 | 30 | 13.96 | 33.49 | 5.60 | 25.05 | 292 | 0.10 |
| 68 | 9.48 | 33.68 | 3.36 | 199 | 50 | 10.11 | 33.50 | 3.81 | 25.78 | 222 | 0.15 |
| 93 | 9.03 | 33.77 | 3.19 | 185 | 75 | 9.50 | 33.70 | 3.31 | 26.04 | 198 | 0.20 |
| 139 | 8.44 | 33.96 | 2.61 | 162 | 100 | 8.89 | 33.81 | 3.10 | 26.23 | 180 | 0.25 |
| 182 | 8.20 | 34.07 | 1.95 | 151 | 150 | 8.37 | 33.99 | 2.43 | 26.45 | 159 | 0.34 |
| 271 | 7.48 | 34.22 | 0.98 | 130 | 200 | 8.10 | 34.11 | 1.73 | 26.58 | 146 | 0.41 |
| 364 | 6.98 | 34.25 | 0.94 | 121 | 250 | 7.65 | 34.21 | 1.15 | 26.73 | 133 | 0.49 |
| 453 | 6.61 | 34.30 | 0.51 | 112 | 300 | 7.25 | 34.23 | 0.97 | 26.80 | 126 | 0.55 |
| 544 | 5.94 | 34.31 | 0.36 | 103 | 400 | 6.85 | 34.28 | 0.76 | 26.89 | 117 | 0.68 |
| 723 | 5.00 | 34.38 | 0.35 | 87 | 500 | 6.24 | 34.30 | 0.42 | 26.99 | 108 | 0.80 |
| 913 | 4.28 | 34.45 | 0.41 | 74 | 600 | 5.61 | 34.33 | 0.35 | 27.09 | 98 | 0.91 |
| 1106 | 3.92 | 34.45 | 0.55 | 71 | 700 | 5.11 | 34.37 | 0.36 | 27.19 | 89 | 1.01 |
| | | | | | 800 | 4.65 | 34.42 | 0.38 | 27.28 | 80 | 1.10 |
| | | | | | 1000 | 4.13 | 34.45 | 0.48 | 27.36 | 73 | 1.27 |

90.60 BLACK DOUGLAS; August 10, 1952; 1721 GCT; 32°25'N, 119°57.5'W; sounding, 650 fm; wind, 270°, force 4; weather, overcast; sea, moderate; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.67 | 33.14 | 5.56 | 374 | 0 | 16.67 | 33.14 | 5.56 | 24.19 | 374 | 0.00 |
| 9 | 16.68 | 33.15 | 5.69 | 374 | 10 | 16.67 | 33.15 | 5.69 | 24.19 | 373 | 0.04 |
| 19 | 16.60 | 33.15 | 5.70 | 372 | 20 | 16.60 | 33.15 | 5.71 | 24.21 | 372 | 0.07 |
| 33 | 15.92 | 33.10 | 5.82 | 361 | 30 | 16.31 | 33.11 | 5.80 | 24.25 | 369 | 0.11 |
| 51 | 14.06 | 33.04 | 6.29 | 327 | 50 | 14.07 | 33.04 | 6.29 | 24.68 | 327 | 0.18 |
| 64 | 12.68 | 33.14 | 5.97 | 293 | 75 | 11.70 | 33.12 | 5.55 | 25.21 | 277 | 0.26 |
| 78 | 11.57 | 33.12 | 5.43 | 275 | 100 | 10.04 | 33.35 | 4.37 | 25.68 | 232 | 0.32 |
| 100 | 10.04 | 33.35 | 4.37 | 232 | 150 | 8.71 | 33.74 | 3.24 | 26.20 | 183 | 0.43 |
| 145 | 8.80 | 33.69 | 3.34 | 188 | 200 | 8.15 | 33.96 | 2.70 | 26.46 | 158 | 0.51 |
| 191 | 8.22 | 33.95 | 2.73 | 160 | 250 | 7.69 | 34.01 | 2.31 | 26.56 | 148 | 0.59 |
| 242 | 7.78 | 34.00 | 2.43 | 150 | 300 | 6.98 | 34.06 | 1.71 | 26.70 | 135 | 0.66 |
| 285 | 7.24 | 34.05 | 1.82 | 139 | 400 | 6.11 | 34.14 | 0.92 | 26.88 | 118 | 0.80 |
| 387 | 6.17 | 34.13 | 1.01 | 119 | 500 | 5.73 | 34.23 | 0.42 | 27.00 | 107 | 0.91 |
| 490 | 5.78 | 34.22 | 0.43 | 108 | 600 | (5.40) | (34.29) | (0.34) | (27.09) | (98) | (1.02) |
| 597 | 5.42 | 34.29 | 0.34 | 99 | | | | | | | |

90.70 BLACK DOUGLAS; August 11, 1952; 0017 GCT; 32°04.5'N, 120°39'W; sounding, 2080 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.23 | 33.19 | 5.34 | 383 | 0 | 17.23 | 33.19 | 5.34 | 24.09 | 383 | 0.00 |
| 9 | 17.24 | 33.15 | 5.95 | 386 | 10 | 17.24 | 33.15 | 5.99 | 24.06 | 386 | 0.04 |
| 22 | 17.24 | 33.15 | 6.05 | 386 | 20 | 17.24 | 33.15 | 6.05 | 24.06 | 386 | 0.08 |
| 49 | 14.98 | 33.08 | 5.52 | 343 | 30 | 17.19 | 33.14 | 6.01 | 24.06 | 386 | 0.12 |
| 70 | 12.88 | 33.10 | 5.55 | 300 | 50 | 14.81 | 33.08 | 5.53 | 24.55 | 339 | 0.19 |
| 97 | 11.52 | 33.12 | 5.54 | 274 | 75 | 12.65 | 33.11 | 5.54 | 25.02 | 295 | 0.27 |
| 142 | 9.62 | 33.44 | 3.95 | 219 | 100 | 11.28 | 33.13 | 5.52 | 25.29 | 269 | 0.34 |
| 186 | 8.71 | 33.84 | 2.94 | 175 | 150 | 9.45 | 33.55 | 3.78 | 25.93 | 208 | 0.46 |
| 272 | 7.56 | 34.05 | 1.80 | 143 | 200 | 8.50 | 33.89 | 2.70 | 26.35 | 169 | 0.56 |
| 364 | 6.44 | 34.11 | 1.25 | 124 | 250 | 7.82 | 34.01 | 2.03 | 26.54 | 150 | 0.64 |
| 451 | 5.87 | 34.14 | 0.74 | 115 | 300 | 7.20 | 34.08 | 1.63 | 26.69 | 136 | 0.71 |
| 539 | 5.60 | 34.25 | 0.39 | 104 | 400 | 6.16 | 34.12 | 1.03 | 26.86 | 120 | 0.84 |
| 713 | 4.87 | 34.36 | 0.30 | 87 | 500 | 5.70 | 34.20 | 0.52 | 26.98 | 109 | 0.96 |
| 898 | 4.28 | 34.42 | 0.45 | 77 | 600 | 5.36 | 34.30 | 0.32 | 27.10 | 97 | 1.07 |
| 1086 | 3.65 | 34.49 | 0.71 | 65 | 700 | 4.92 | 34.35 | 0.30 | 27.19 | 89 | 1.17 |
| | | | | | 800 | 4.54 | 34.38 | 0.34 | 27.26 | 82 | 1.27 |
| | | | | | 1000 | 3.94 | 34.46 | 0.60 | 27.38 | 70 | 1.44 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| BLACK DOUGLAS; August 9, 1952; 1155 GCT; 32°56'N, 117°19'W; sounding, 140 fm; wind, calm; weather, overcast; sea, slight; wire angle, 03°. | | | | | | | | | | | 93.27 |
| 0 | 20.25 | 33.35 | 5.39 | 443 | 0 | 20.25 | 33.35 | 5.39 | 23.46 | 443 | 0.00 |
| 10 | 17.17 | 33.39 | 6.13 | 367 | 10 | 17.17 | 33.39 | 6.13 | 24.26 | 367 | 0.04 |
| 25 | 14.07 | 33.51 | 6.77 | 293 | 20 | 14.85 | 33.49 | 6.68 | 24.86 | 310 | 0.07 |
| 50 | 10.68 | 33.40 | 4.76 | 239 | 30 | 12.97 | 33.50 | 6.70 | 25.26 | 272 | 0.10 |
| 73 | 9.78 | 33.68 | 3.54 | 204 | 50 | 10.68 | 33.40 | 4.76 | 25.61 | 239 | 0.15 |
| 97 | 9.73 | 33.73 | 3.09 | 199 | 75 | 9.75 | 33.68 | 3.53 | 25.98 | 203 | 0.21 |
| 120 | 9.52 | 33.86 | 2.53 | 186 | 100 | 9.71 | 33.74 | 2.96 | 26.04 | 198 | 0.26 |
| 149 | 9.42 | 33.98 | 2.29 | 176 | 150 | (9.41) | (33.98) | (2.28) | (26.27) | (176) | (0.36) |
| BLACK DOUGLAS; August 9, 1952; 0851, 0921 GCT; 32°50'N, 117°31.5'W; sounding, 450 fm; wind, calm; weather, overcast; sea, slight; wire angle, 04°, 04°. | | | | | | | | | | | 93.30 |
| 0 | 19.33 | 33.44 | 5.50 | 414 | 0 | 19.33 | 33.44 | 5.50 | 23.77 | 414 | 0.00 |
| 10 | 17.82 | 33.33 | 5.64 | 386 | 10 | 17.82 | 33.33 | 5.64 | 24.06 | 386 | 0.04 |
| 20 | 15.16 | 33.31 | 6.26 | 329 | 20 | 15.16 | 33.31 | 6.26 | 24.66 | 329 | 0.08 |
| 35 | 12.50 | 33.30 | 5.83 | 278 | 30 | 13.15 | 33.30 | 6.14 | 25.07 | 290 | 0.11 |
| 50 | 11.52 | 33.31 | 5.23 | 260 | 50 | 11.52 | 33.31 | 5.23 | 25.39 | 260 | 0.16 |
| 64 | 10.54 | 33.35 | 4.50 | 240 | 75 | 10.15 | 33.41 | 4.10 | 25.71 | 229 | 0.22 |
| 78 | 10.11 | 33.42 | 4.08 | 228 | 100 | 9.53 | 33.71 | 3.45 | 26.04 | 197 | 0.28 |
| 96 | 9.62 | 33.68 | 3.52 | 201 | 150 | 8.89 | 33.91 | 2.91 | 26.30 | 173 | 0.37 |
| | | | | | 200 | 9.40 | 34.22 | 1.50 | 26.46 | 158 | 0.46 |
| 147 | 8.88 | 33.89 | 3.05 | 174 | 250 | 9.12 | 34.32 | 1.13 | 26.59 | 146 | 0.53 |
| 193 | 9.42 | 34.18 | 1.60 | 161 | 300 | 8.58 | 34.26 | 1.05 | 26.63 | 142 | 0.61 |
| 239 | 9.24 | 34.33 | 1.13 | 147 | 400 | 7.74 | 34.34 | 0.61 | 26.81 | 124 | 0.75 |
| 285 | 8.74 | 34.26 | 1.15 | 145 | 500 | 6.95 | 34.33 | 0.45 | 26.92 | 114 | 0.87 |
| 384 | 7.86 | 34.34 | 0.62 | 126 | 600 | (6.04) | (34.36) | | (27.06) | (101) | (0.99) |
| 480 | 7.12 | 34.33 | 0.49 | 117 | | | | | | | |
| 585 | 6.19 | 34.36 | 0.31 | 102 | | | | | | | |
| BLACK DOUGLAS; August 9, 1952; 0237 GCT; 32°30'N, 118°12.5'W; sounding, 930 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 09°. | | | | | | | | | | | 93.40 |
| 0 | 18.83 | 33.39 | 4.86 | 406 | 0 | 18.83 | 33.39 | 4.86 | 23.86 | 406 | 0.00 |
| 10 | 18.24 | 33.46 | 5.35 | 387 | 10 | 18.24 | 33.46 | 5.35 | 24.06 | 387 | 0.04 |
| 20 | 17.25 | 33.37 | 5.62 | 370 | 20 | 17.25 | 33.37 | 5.62 | 24.23 | 370 | 0.08 |
| 35 | 13.29 | 33.26 | 6.08 | 296 | 30 | 13.90 | 33.27 | 6.00 | 24.89 | 307 | 0.11 |
| 49 | 12.39 | 33.33 | 6.03 | 274 | 50 | 12.28 | 33.33 | 5.98 | 25.26 | 272 | 0.17 |
| 64 | 10.38 | 33.26 | 4.89 | 244 | 75 | 9.86 | 33.40 | 4.50 | 25.75 | 226 | 0.23 |
| 78 | 9.84 | 33.41 | 4.45 | 224 | 100 | 9.51 | 33.63 | 3.58 | 25.99 | 203 | 0.29 |
| 97 | 9.54 | 33.60 | 3.67 | 206 | 150 | 9.32 | 33.91 | 2.66 | 26.23 | 179 | 0.38 |
| 149 | 9.34 | 33.91 | 2.67 | 180 | 200 | 8.65 | 34.08 | 2.23 | 26.47 | 157 | 0.47 |
| 195 | 8.65 | 34.06 | 2.32 | 158 | 250 | 8.56 | 34.19 | 1.51 | 26.57 | 147 | 0.55 |
| 241 | 8.65 | 34.18 | 1.56 | 149 | 300 | 7.78 | 34.23 | 1.16 | 26.72 | 133 | 0.62 |
| 287 | 7.94 | 34.23 | 1.23 | 135 | 400 | 6.98 | 34.23 | 0.67 | 26.84 | 122 | 0.75 |
| 385 | 7.12 | 34.23 | 0.72 | 124 | 500 | 6.12 | 34.28 | 0.37 | 26.99 | 108 | 0.87 |
| 481 | 6.24 | 34.27 | 0.40 | 110 | 600 | (5.49) | (34.35) | | (27.12) | (95) | (0.98) |
| 585 | 5.58 | 34.34 | 0.26 | 97 | | | | | | | |
| BLACK DOUGLAS; August 8, 1952; 2042 GCT; 32°10'N, 118°53.5'W; sounding, 820 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 19°. | | | | | | | | | | | 93.50 |
| 0 | 17.15 | 33.31 | 5.58 | 373 | 0 | 17.15 | 33.31 | 5.58 | 24.20 | 373 | 0.00 |
| 9 | 16.96 | 33.30 | 5.68 | 369 | 10 | 16.89 | 33.30 | 5.70 | 24.26 | 367 | 0.04 |
| 18 | 16.08 | 33.30 | 5.89 | 350 | 20 | 15.93 | 33.30 | 5.92 | 24.48 | 346 | 0.07 |
| 33 | 14.44 | 33.35 | 6.03 | 312 | 30 | 14.90 | 33.34 | 6.02 | 24.74 | 322 | 0.11 |
| 52 | 11.71 | 33.28 | 5.35 | 265 | 50 | 11.88 | 33.29 | 5.50 | 25.31 | 268 | 0.17 |
| 61 | 10.78 | 33.26 | 4.61 | 251 | 75 | 9.80 | 33.42 | 4.12 | 25.77 | 223 | 0.23 |
| 75 | 9.80 | 33.42 | 4.12 | 223 | 100 | 9.09 | 33.61 | 3.36 | 26.04 | 198 | 0.28 |
| 93 | 9.16 | 33.57 | 3.46 | 202 | 150 | 8.58 | 33.83 | 2.50 | 26.29 | 174 | 0.37 |
| 141 | 8.68 | 33.78 | 2.70 | 179 | 200 | 8.21 | 34.12 | 1.75 | 26.57 | 147 | 0.46 |
| 184 | 8.26 | 34.04 | 1.90 | 154 | 250 | 7.85 | 34.17 | 1.13 | 26.67 | 138 | 0.53 |
| 227 | 8.10 | 34.16 | 1.48 | 143 | 300 | 7.28 | 34.21 | 0.80 | 26.78 | 128 | 0.60 |
| 270 | 7.57 | 34.18 | 0.92 | 134 | 400 | 6.58 | 34.27 | 0.48 | 26.92 | 114 | 0.72 |
| 364 | 6.82 | 34.27 | 0.55 | 117 | 500 | 6.10 | 34.27 | 0.35 | 26.98 | 108 | 0.84 |
| 456 | 6.28 | 34.27 | 0.40 | 110 | | | | | | | |
| 556 | 5.96 | 34.27 | 0.30 | 106 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | $\Delta D$<br>dyn m |

97.30 BLACK DOUGLAS; August 8, 1952; 0103 GCT; 32°15.5'N, 117°09'W; sounding, 33 fm; wind, 280°, force 1; weather, overcast; sea, slight; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.06 | 33.48 | 5.73 | 429 | 0 | 20.06 | 33.48 | 5.73 | 23.61 | 429 | 0.00 |
| 10 | 12.80 | 33.37 | 5.63 | 278 | 10 | 12.80 | 33.37 | 5.63 | 25.19 | 278 | 0.04 |
| 20 | 11.02 | 33.55 | 4.41 | 233 | 20 | 11.02 | 33.55 | 4.41 | 25.66 | 233 | 0.06 |
| 30 | 10.38 | 33.55 | 3.84 | 223 | 30 | 10.38 | 33.55 | 3.84 | 25.78 | 223 | 0.08 |

97.32 BLACK DOUGLAS; August 8, 1952; 0230 GCT; 32°11.5'N, 117°17'W; sounding, 740 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.05 | 33.49 | 5.26 | 428 | 0 | 20.05 | 33.49 | 5.26 | 23.62 | 428 | 0.00 |
| 9 | 18.56 | 33.46 | 5.48 | 394 | 10 | 18.25 | 33.45 | 5.49 | 24.05 | 388 | 0.04 |
| 19 | 15.02 | 33.32 | 5.90 | 326 | 20 | 14.80 | 33.32 | 5.89 | 24.74 | 321 | 0.08 |
| 33 | 12.06 | 33.31 | 5.61 | 269 | 30 | 12.50 | 33.31 | 5.70 | 25.20 | 277 | 0.11 |
| 48 | 10.74 | 33.39 | 4.29 | 241 | 50 | 10.55 | 33.41 | 4.00 | 25.64 | 236 | 0.16 |
| 62 | 10.00 | 33.53 | 3.49 | 218 | 75 | 9.94 | 33.62 | 3.33 | 25.91 | 211 | 0.21 |
| 75 | 9.94 | 33.62 | 3.33 | 211 | 100 | 9.65 | 33.85 | 2.44 | 26.13 | 189 | 0.26 |
| 93 | 9.67 | 33.80 | 2.44 | 193 | 150 | 9.58 | 34.03 | 2.41 | 26.29 | 174 | 0.36 |
| 142 | 9.60 | 34.02 | 2.43 | 176 | 200 | 9.46 | 34.21 | 1.98 | 26.45 | 159 | 0.44 |
| 186 | 9.50 | 34.16 | 2.19 | 164 | 250 | 9.07 | 34.25 | 1.56 | 26.54 | 150 | 0.52 |
| 230 | 9.35 | 34.25 | 1.64 | 155 | 300 | 8.36 | 34.26 | 1.23 | 26.66 | 139 | 0.60 |
| 275 | 8.56 | 34.25 | 1.42 | 143 | 400 | 7.75 | 34.32 | 0.65 | 26.80 | 126 | 0.73 |
| 371 | 8.05 | 34.33 | 0.75 | 129 | 500 | 6.74 | 34.32 | 0.41 | 26.94 | 112 | 0.86 |
| 464 | 6.98 | 34.31 | 0.48 | 116 | | | | | | | |
| 567 | 6.40 | 34.38 | 0.33 | 104 | | | | | | | |

97.40 BLACK DOUGLAS; August 8, 1952; 0830 GCT; 31°55.5'N, 117°50'W; sounding, 590 fm; wind, 290°, force 1; weather, overcast; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.01 | 33.49 | 5.55 | 403 | 0 | 19.01 | 33.49 | 5.55 | 23.89 | 403 | 0.00 |
| 10 | 18.99 | 33.49 | 5.52 | 402 | 10 | 18.99 | 33.49 | 5.52 | 23.89 | 402 | 0.04 |
| 20 | 17.15 | 33.49 | 6.07 | 359 | 20 | 17.15 | 33.49 | 6.07 | 24.34 | 359 | 0.08 |
| 35 | 11.93 | 33.42 | 5.63 | 259 | 30 | 12.95 | 33.43 | 5.80 | 25.21 | 277 | 0.11 |
| 50 | 10.65 | 33.49 | 4.42 | 232 | 50 | 10.65 | 33.49 | 4.42 | 25.68 | 232 | 0.16 |
| 64 | 9.88 | 33.58 | 3.66 | 213 | 75 | 9.63 | 33.65 | 3.48 | 25.98 | 203 | 0.22 |
| 79 | 9.57 | 33.69 | 3.45 | 199 | 100 | 9.28 | 33.78 | 3.23 | 26.14 | 188 | 0.27 |
| 98 | 9.30 | 33.77 | 3.26 | 189 | 150 | 9.13 | 34.10 | 2.23 | 26.41 | 162 | 0.35 |
| 149 | 9.14 | 34.09 | 2.26 | 163 | 200 | 8.80 | 34.21 | 1.63 | 26.55 | 149 | 0.43 |
| 195 | 8.80 | 34.20 | 1.71 | 150 | 250 | 8.84 | 34.33 | 0.92 | 26.64 | 141 | 0.51 |
| 242 | 8.84 | 34.33 | 1.02 | 141 | 300 | 8.79 | 34.33 | 0.66 | 26.65 | 140 | 0.58 |
| 288 | 8.85 | 34.34 | 0.65 | 140 | 400 | 7.42 | 34.29 | 0.64 | 26.82 | 124 | 0.72 |
| 387 | 7.58 | 34.29 | 0.69 | 126 | 500 | 6.58 | 34.29 | 0.40 | 26.94 | 113 | 0.84 |
| 483 | 6.70 | 34.29 | 0.43 | 114 | 600 | (5.98) | (34.37) | | (27.08) | (99) | (0.96) |
| 586 | 6.06 | 34.36 | 0.27 | 101 | | | | | | | |

97.50 BLACK DOUGLAS; August 8, 1952; 1455 GCT; 31°35.5'N, 118°30.5'W; sounding, 1120 fm; wind, 280°, force 1; weather, overcast; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.56 | 33.37 | 5.70 | 377 | 0 | 17.56 | 33.37 | 5.70 | 24.15 | 377 | 0.00 |
| 10 | 17.56 | 33.37 | 5.72 | 377 | 10 | 17.56 | 33.37 | 5.72 | 24.15 | 377 | 0.04 |
| 20 | 17.31 | 33.39 | 5.76 | 370 | 20 | 17.31 | 33.39 | 5.76 | 24.23 | 370 | 0.08 |
| 35 | 13.39 | 33.13 | 6.03 | 307 | 30 | 14.52 | 33.22 | 5.99 | 24.72 | 323 | 0.11 |
| 50 | 12.22 | 33.31 | 5.47 | 272 | 50 | 12.22 | 33.31 | 5.47 | 25.26 | 272 | 0.17 |
| 64 | 10.62 | 33.37 | 4.58 | 240 | 75 | 10.05 | 33.41 | 4.42 | 25.72 | 228 | 0.23 |
| 79 | 9.95 | 33.42 | 4.38 | 225 | 100 | 9.55 | 33.59 | 3.66 | 25.95 | 207 | 0.29 |
| 99 | 9.56 | 33.57 | 3.71 | 208 | 150 | 8.65 | 33.83 | 2.93 | 26.28 | 175 | 0.38 |
| 152 | 8.62 | 33.84 | 2.88 | 174 | 200 | 8.16 | 33.97 | 2.38 | 26.46 | 158 | 0.47 |
| 198 | 8.19 | 33.96 | 2.41 | 159 | 250 | 7.80 | 34.14 | 1.82 | 26.65 | 140 | 0.54 |
| 244 | 7.83 | 34.13 | 1.87 | 141 | 300 | 7.54 | 34.21 | 1.33 | 26.74 | 131 | 0.61 |
| 291 | 7.60 | 34.20 | 1.41 | 133 | 400 | 6.82 | 34.32 | 0.53 | 26.93 | 113 | 0.74 |
| 390 | 6.90 | 34.31 | 0.56 | 115 | 500 | 6.19 | 34.34 | 0.37 | 27.03 | 104 | 0.86 |
| 487 | 6.27 | 34.34 | 0.39 | 105 | 600 | (5.67) | (34.33) | (0.28) | (27.09) | (98) | (0.97) |
| 591 | 5.71 | 34.33 | 0.29 | 99 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; August 9, 1952; 0252 GCT; 31°42'N, 116°43.5'W; sounding, 55 fm; wind, 140°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 100.29 |
| 0 | 15.51 | 33.40 | 7.52 | 330 | 0 | 15.51 | 33.40 | 7.52 | 24.65 | 330 | 0.00 |
| 10 | 12.47 | 33.40 | 6.32 | 270 | 10 | 12.47 | 33.40 | 6.32 | 25.28 | 270 | 0.03 |
| 20 | 10.95 | 33.46 | 4.61 | 239 | 20 | 10.95 | 33.46 | 4.61 | 25.61 | 239 | 0.06 |
| 30 | 10.78 | 33.55 | 4.16 | 229 | 30 | 10.78 | 33.55 | 4.16 | 25.71 | 229 | 0.08 |
| 50 | 10.38 | 33.69 | 3.00 | 212 | 50 | 10.38 | 33.69 | 3.00 | 25.89 | 212 | 0.12 |
| CREST; August 9, 1952; 0417 GCT; 31°40.5'N, 116°46.5'W; sounding, 240 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 14°. | | | | | | | | | | | 100.30 |
| 0 | 18.48 | 33.49 | 5.53 | 390 | 0 | 18.48 | 33.49 | 5.53 | 24.02 | 390 | 0.00 |
| 10 | 13.46 | 33.42 | 6.39 | 287 | 10 | 13.46 | 33.42 | 6.39 | 25.10 | 287 | 0.03 |
| 24 | 11.20 | 33.39 | 4.84 | 248 | 20 | 11.39 | 33.39 | 5.30 | 25.47 | 252 | 0.06 |
| 48 | 10.40 | 33.58 | 3.80 | 221 | 30 | 10.97 | 33.40 | 4.60 | 25.56 | 244 | 0.09 |
| 72 | 9.99 | 33.84 | 2.15 | 195 | 50 | 10.33 | 33.62 | 3.60 | 25.84 | 217 | 0.13 |
| 95 | 9.96 | 33.87 | 1.87 | 192 | 75 | 9.98 | 33.85 | 2.12 | 26.08 | 194 | 0.18 |
| 146 | 9.76 | 33.96 | 1.45 | 182 | 100 | 9.94 | 33.87 | 1.83 | 26.10 | 192 | 0.23 |
| 193 | 9.81 | 34.13 | 1.18 | 171 | 150 | 9.77 | 33.98 | 1.41 | 26.21 | 181 | 0.33 |
| 240 | 9.75 | 34.25 | 1.22 | 161 | 200 | 9.81 | 34.16 | 1.18 | 26.35 | 168 | 0.42 |
| 287 | 9.42 | 34.33 | 0.97 | 150 | 250 | 9.72 | 34.27 | 1.22 | 26.45 | 159 | 0.50 |
| 342 | 8.63 | 34.33 | - | 138 | 300 | 9.26 | 34.33 | | 26.57 | 147 | 0.58 |
| CREST; August 9, 1952; 0938 GCT; 31°21'N, 117°27'W; sounding, 1000 fm; wind, 320°, force 2; weather, cloudy; sea, slight; wire angle, 15°. | | | | | | | | | | | 100.40 |
| 0 | 19.30 | 33.46 | 5.30 | 412 | 0 | 19.30 | 33.46 | 5.30 | 23.79 | 412 | 0.00 |
| 10 | 19.30 | 33.44 | 5.12 | 413 | 10 | 19.30 | 33.44 | 5.12 | 23.77 | 413 | 0.04 |
| 24 | 19.30 | 33.44 | 4.84 | 413 | 20 | 19.30 | 33.44 | 4.85 | 23.77 | 413 | 0.08 |
| 48 | 14.18 | 33.24 | 5.89 | 315 | 30 | 19.10 | 33.42 | 4.90 | 23.81 | 410 | 0.12 |
| 72 | 11.60 | 33.31 | 5.07 | 261 | 50 | 13.65 | 33.24 | 5.87 | 24.92 | 304 | 0.20 |
| 95 | 10.36 | 33.57 | 4.03 | 221 | 75 | 11.40 | 33.33 | 4.88 | 25.42 | 256 | 0.27 |
| 146 | 9.72 | 33.96 | 2.57 | 182 | 100 | 10.24 | 33.63 | 3.76 | 25.86 | 215 | 0.33 |
| 192 | 8.58 | 34.00 | 2.70 | 162 | 150 | 9.69 | 33.97 | 2.58 | 26.22 | 181 | 0.43 |
| 238 | 8.00 | 34.13 | 2.23 | 143 | 200 | 8.30 | 34.02 | 2.66 | 26.48 | 156 | 0.51 |
| 283 | 7.52 | 34.16 | 1.61 | 135 | 250 | 7.76 | 34.15 | 2.09 | 26.66 | 139 | 0.59 |
| 380 | 7.46 | 34.40 | 0.51 | 116 | 300 | 7.51 | 34.18 | 1.31 | 26.72 | 133 | 0.66 |
| 474 | 6.47 | 34.36 | 0.40 | 106 | 400 | 7.33 | 34.40 | 0.47 | 26.92 | 114 | 0.79 |
| 570 | 5.76 | 34.36 | 0.31 | 97 | 500 | 6.27 | 34.36 | 0.37 | 27.03 | 103 | 0.90 |
| 762 | 4.83 | 34.45 | 0.30 | 80 | 600 | 5.56 | 34.37 | 0.31 | 27.13 | 94 | 1.01 |
| 953 | 4.23 | 34.49 | 0.48 | 71 | 700 | 5.07 | 34.42 | 0.30 | 27.23 | 85 | 1.10 |
| 1153 | 3.68 | 34.51 | 0.64 | 64 | 800 | 4.71 | 34.47 | 0.32 | 27.31 | 77 | 1.19 |
| | | | | | 1000 | 4.10 | 34.50 | 0.52 | 27.40 | 69 | 1.36 |
| CREST; August 9, 1952; 1454 GCT; 31°00'N, 118°07'W; sounding, 760 fm; wind, 280°, force 2; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | 100.50 |
| 0 | 18.00 | 33.22 | 5.21 | 398 | 0 | 18.00 | 33.22 | 5.21 | 23.93 | 398 | 0.00 |
| 10 | 17.98 | 33.22 | 5.36 | 398 | 10 | 17.98 | 33.22 | 5.36 | 23.94 | 398 | 0.04 |
| 20 | 17.29 | 33.17 | 5.26 | 386 | 20 | 17.29 | 33.17 | 5.26 | 24.06 | 386 | 0.08 |
| 35 | 15.98 | 33.13 | 4.76 | 360 | 30 | 16.34 | 33.14 | 4.80 | 24.26 | 367 | 0.12 |
| 50 | 15.02 | 33.13 | 5.38 | 340 | 50 | 15.02 | 33.13 | 5.38 | 24.55 | 340 | 0.19 |
| 65 | 13.72 | 33.13 | 5.47 | 314 | 75 | 13.30 | 33.13 | 5.30 | 24.91 | 306 | 0.27 |
| 79 | 13.18 | 33.13 | 4.90 | 303 | 100 | 12.09 | 33.31 | 4.58 | 25.28 | 270 | 0.34 |
| 98 | 12.32 | 33.31 | 4.57 | 274 | 150 | 9.54 | 33.54 | 3.65 | 25.91 | 210 | 0.46 |
| 121 | 10.57 | 33.25 | 4.60 | 248 | 200 | 8.88 | 34.00 | 2.66 | 26.38 | 166 | 0.56 |
| 149 | 9.56 | 33.51 | 3.78 | 213 | 250 | 8.20 | 34.14 | 1.90 | 26.59 | 146 | 0.64 |
| 195 | 8.94 | 33.98 | 2.71 | 168 | 300 | 7.93 | 34.17 | 1.53 | 26.65 | 140 | 0.71 |
| 243 | 8.25 | 34.13 | 1.98 | 147 | 400 | 6.96 | 34.28 | 0.73 | 26.88 | 118 | 0.85 |
| 290 | 7.99 | 34.16 | 1.61 | 141 | 500 | 6.12 | 34.29 | 0.38 | 27.00 | 107 | 0.97 |
| 392 | 7.03 | 34.27 | 0.80 | 120 | 600 | (5.70) | (34.37) | (0.29) | (27.11) | (96) | (1.07) |
| 488 | 6.20 | 34.29 | 0.38 | 108 | | | | | | | |
| 592 | 5.72 | 34.36 | 0.28 | 97 | | | | | | | |

SIO

CCOFI 5208

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

100.60 CREST; August 9, 1952; 1942 GCT; 30°37'N, 118°48.5'W; sounding, 1650 fm; wind, 290°, force 3; weather, overcast; sea, rough; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.77 | 33.39 | 5.70 | 404 | 0 | 18.77 | 33.39 | 5.70 | 23.87 | 404 | 0.00 |
| 10 | 18.76 | 33.39 | 5.44 | 404 | 10 | 18.76 | 33.39 | 5.44 | 23.87 | 404 | 0.04 |
| 25 | 17.94 | 33.28 | 6.14 | 393 | 20 | 18.41 | 33.34 | 6.07 | 23.92 | 399 | 0.08 |
| 50 | 14.95 | 33.19 | 5.10 | 334 | 30 | 17.19 | 33.26 | 6.10 | 24.16 | 377 | 0.12 |
| 75 | 13.68 | 33.15 | 4.84 | 311 | 50 | 14.95 | 33.19 | 5.10 | 24.61 | 334 | 0.19 |
| 100 | 11.72 | 33.15 | 4.82 | 275 | 75 | 13.68 | 33.15 | 4.84 | 24.85 | 311 | 0.27 |
| 152 | 9.38 | 33.55 | 3.76 | 207 | 100 | 11.72 | 33.15 | 4.82 | 25.23 | 275 | 0.35 |
| 198 | 8.82 | 33.89 | 3.04 | 173 | 150 | 9.41 | 33.54 | 3.80 | 25.93 | 208 | 0.47 |
| 243 | 8.18 | 34.04 | 2.05 | 153 | 200 | 8.79 | 33.90 | 2.99 | 26.31 | 172 | 0.56 |
| | | | | | 250 | (8.09) | (34.05) | (1.93) | (26.54) | (151) | (0.65) |

100.70 CREST; August 10, 1952; 0044 GCT; 30°18'N, 119°26'W; sounding, 2000 fm; wind, 300°, force 4; weather, cloudy; sea, rough; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.08 | 33.31 | 4.83 | 418 | 0 | 19.08 | 33.31 | 4.83 | 23.73 | 418 | 0.00 |
| 9 | 19.08 | 33.31 | 5.33 | 418 | 10 | 19.08 | 33.31 | 5.34 | 23.73 | 418 | 0.04 |
| 19 | 17.35 | 33.28 | 5.46 | 379 | 20 | 17.20 | 33.28 | 5.46 | 24.17 | 376 | 0.08 |
| 33 | 16.15 | 33.22 | 5.27 | 357 | 30 | 16.39 | 33.23 | 5.30 | 24.32 | 361 | 0.12 |
| 47 | 15.07 | 33.24 | 5.76 | 333 | 50 | 14.72 | 33.23 | 5.75 | 24.69 | 326 | 0.19 |
| 61 | 14.05 | 33.13 | 5.59 | 320 | 75 | 13.47 | 33.13 | 5.20 | 24.87 | 309 | 0.27 |
| 74 | 13.48 | 33.13 | 5.20 | 309 | 100 | 12.25 | 33.18 | 5.21 | 25.15 | 282 | 0.34 |
| 92 | 12.69 | 33.19 | 5.29 | 290 | 150 | 9.39 | 33.51 | 4.48 | 25.91 | 210 | 0.47 |
| 114 | 11.02 | 33.12 | 4.87 | 265 | 200 | 8.54 | 33.94 | 3.12 | 26.38 | 165 | 0.56 |
| 140 | 9.64 | 33.35 | 4.66 | 226 | 250 | 7.90 | 34.03 | 2.42 | 26.55 | 150 | 0.64 |
| 183 | 8.80 | 33.82 | 3.44 | 178 | 300 | 7.36 | 34.06 | 1.92 | 26.65 | 140 | 0.72 |
| 226 | 8.21 | 34.02 | 2.74 | 155 | 400 | 6.56 | 34.20 | 0.82 | 26.87 | 119 | 0.85 |
| 269 | 7.67 | 34.04 | 2.22 | 146 | 500 | 5.87 | 34.29 | 0.47 | 27.03 | 104 | 0.97 |
| 364 | 6.83 | 34.16 | 1.20 | 125 | | | | | | | |
| 456 | 6.12 | 34.25 | 0.59 | 110 | | | | | | | |
| 556 | 5.58 | 34.33 | 0.34 | 97 | | | | | | | |

100.80 CREST; August 10, 1952; 0558, 0626 GCT; 30°01'N, 120°07'W; sounding, 2100 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 25°, 35°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.36 | 33.19 | 5.04 | 409 | 0 | 18.36 | 33.19 | 5.04 | 23.82 | 409 | 0.00 |
| 9 | 18.36 | 33.19 | 5.00 | 409 | 10 | 18.35 | 33.19 | 5.00 | 23.82 | 409 | 0.04 |
| 23 | 17.87 | 33.17 | 4.92 | 399 | 20 | 18.03 | 33.17 | 4.93 | 23.89 | 403 | 0.08 |
| 45 | 16.66 | 33.39 | 5.22 | 356 | 30 | 17.57 | 33.18 | 5.02 | 24.00 | 392 | 0.12 |
| 68 | 15.40 | 33.51 | 5.25 | 320 | 50 | 16.33 | 33.44 | 5.22 | 24.49 | 345 | 0.20 |
| 90 | 13.98 | 33.35 | 5.55 | 303 | 75 | 15.00 | 33.46 | 5.40 | 24.81 | 315 | 0.28 |
| 134 | 10.80 | 33.26 | 4.71 | 251 | 100 | 13.13 | 33.32 | 5.51 | 25.09 | 288 | 0.35 |
| 173 | 9.06 | 33.64 | 3.54 | 195 | 150 | 10.01 | 33.33 | 4.23 | 25.67 | 233 | 0.49 |
| 213 | 8.55 | 33.96 | 2.59 | 164 | 200 | 8.68 | 33.87 | 2.81 | 26.30 | 173 | 0.59 |
| 254 | 8.32 | 34.05 | 2.21 | 154 | 250 | 8.34 | 34.04 | 2.22 | 26.49 | 155 | 0.67 |
| | | | | | 300 | 7.78 | 34.10 | 1.79 | 26.62 | 143 | 0.75 |
| 322 | 7.45 | 34.13 | 1.36 | 136 | 400 | 6.61 | 34.23 | 0.74 | 26.89 | 117 | 0.89 |
| 398 | 6.62 | 34.23 | 0.75 | 118 | 500 | 5.96 | 34.24 | 0.52 | 26.98 | 109 | 1.00 |
| 481 | 6.08 | 34.23 | 0.56 | 111 | 600 | 5.39 | 34.33 | 0.42 | 27.12 | 95 | 1.11 |
| 646 | 5.16 | 34.36 | 0.39 | 90 | 700 | 4.92 | 34.39 | 0.40 | 27.22 | 86 | 1.21 |
| 816 | 4.45 | 34.42 | 0.42 | 78 | 800 | 4.52 | 34.42 | 0.41 | 27.29 | 79 | 1.30 |
| 1008 | 3.88 | 34.45 | 0.59 | 70 | 1000 | 3.90 | 34.45 | 0.58 | 27.38 | 71 | 1.47 |

103.30 CREST; August 11, 1952; 0917 GCT; 31°05'N, 116°25'W; sounding, 43 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.29 | 33.53 | 5.99 | 316 | 0 | 15.29 | 33.53 | 5.99 | 24.80 | 316 | 0.00 |
| 10 | 13.44 | 33.50 | 5.44 | 281 | 10 | 13.44 | 33.50 | 5.44 | 25.16 | 281 | 0.03 |
| 20 | 11.60 | 33.48 | 4.67 | 249 | 20 | 11.60 | 33.48 | 4.67 | 25.50 | 249 | 0.06 |
| 30 | 10.45 | 33.49 | 3.66 | 228 | 30 | 10.45 | 33.49 | 3.66 | 25.72 | 228 | 0.08 |
| 50 | 10.15 | 33.66 | 2.85 | 211 | 50 | 10.15 | 33.66 | 2.85 | 25.90 | 211 | 0.12 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; August 11, 1952; 0618 GCT; 30°53'N, 116°42'W; sounding, 970 fm; wind, 320°, force 5; weather, overcast; sea, slight; wire angle, 30°. | | | | | | | | | | | 103.35 |
| 0 | 16.97 | 33.40 | 5.42 | 362 | 0 | 16.97 | 33.40 | 5.42 | 24.32 | 362 | 0.00 |
| 8 | 16.93 | 33.39 | 5.20 | 362 | 10 | 16.90 | 33.39 | 5.22 | 24.32 | 361 | 0.04 |
| 17 | 13.88 | 33.30 | 6.05 | 304 | 20 | 12.50 | 33.30 | 6.03 | 25.20 | 278 | 0.07 |
| 30 | 11.24 | 33.31 | 4.52 | 255 | 30 | 11.24 | 33.31 | 4.52 | 25.44 | 255 | 0.09 |
| 48 | 10.33 | 33.58 | 3.78 | 220 | 50 | 10.33 | 33.63 | 3.60 | 25.85 | 216 | 0.14 |
| 57 | 10.30 | 33.80 | 2.40 | 203 | 75 | 10.17 | 33.85 | 1.94 | 26.05 | 197 | 0.19 |
| 72 | 10.19 | 33.84 | 1.98 | 198 | 100 | 10.10 | 33.91 | 1.74 | 26.10 | 192 | 0.24 |
| 92 | 10.11 | 33.89 | 1.79 | 193 | 150 | 10.07 | 34.10 | 1.44 | 26.26 | 177 | 0.34 |
| 112 | 10.08 | 33.93 | 1.66 | 190 | 200 | 10.19 | 34.38 | 0.75 | 26.46 | 158 | 0.42 |
| 136 | 10.02 | 34.02 | 1.54 | 182 | 250 | 9.87 | 34.40 | 0.58 | 26.53 | 152 | 0.50 |
| 179 | 10.26 | 34.31 | 1.12 | 165 | 300 | 9.46 | 34.39 | 0.61 | 26.59 | 146 | 0.58 |
| 229 | 10.00 | 34.40 | 0.53 | 154 | 400 | 8.17 | 34.35 | 0.54 | 26.76 | 130 | 0.72 |
| 272 | 9.72 | 34.40 | 0.62 | 149 | 500 | 6.88 | 34.33 | 0.43 | 26.93 | 113 | 0.85 |
| 374 | 8.52 | 34.36 | 0.57 | 134 | 600 | (5.85) | (34.28) | | (27.02) | (104) | (0.97) |
| 477 | 7.16 | 34.34 | 0.45 | 116 | | | | | | | |
| 584 | 5.99 | 34.29 | 0.41 | 105 | | | | | | | |
| CREST; August 11, 1952; 0237, 0256 GCT; 30°43'N, 117°04'W; sounding, 850 fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 30°, 30°. | | | | | | | | | | | 103.40 |
| 0 | 18.51 | 33.42 | 4.95 | 396 | 0 | 18.51 | 33.42 | 4.95 | 23.96 | 396 | 0.00 |
| 9 | 18.48 | 33.40 | 5.42 | 397 | 10 | 18.46 | 33.40 | 5.42 | 23.96 | 396 | 0.04 |
| 18 | 17.81 | 33.40 | 5.46 | 381 | 20 | 17.53 | 33.40 | 5.48 | 24.18 | 375 | 0.08 |
| 32 | 15.91 | 33.37 | 6.08 | 341 | 30 | 16.29 | 33.37 | 6.05 | 24.45 | 349 | 0.11 |
| 49 | 11.23 | 33.40 | 4.50 | 248 | 50 | 11.12 | 33.40 | 4.47 | 25.53 | 246 | 0.17 |
| 62 | 10.22 | 33.51 | 3.88 | 223 | 75 | 10.05 | 33.55 | 3.71 | 25.83 | 217 | 0.23 |
| 74 | 10.06 | 33.55 | 3.72 | 218 | 100 | 9.40 | 33.77 | 3.05 | 26.11 | 191 | 0.28 |
| 92 | 9.56 | 33.69 | 3.29 | 199 | 150 | 8.99 | 34.01 | 2.33 | 26.37 | 167 | 0.37 |
| 111 | 9.29 | 33.84 | 2.83 | 184 | 200 | 8.52 | 34.10 | 1.88 | 26.51 | 153 | 0.46 |
| 134 | 9.11 | 33.96 | 2.52 | 172 | 250 | 8.28 | 34.18 | 1.52 | 26.61 | 144 | 0.53 |
| | | | | | 300 | 7.91 | 34.23 | 1.31 | 26.70 | 135 | 0.60 |
| 179 | 8.68 | 34.07 | 2.07 | 158 | 400 | 6.84 | 34.25 | 0.69 | 26.87 | 119 | 0.74 |
| 228 | 8.38 | 34.14 | 1.67 | 148 | 500 | 6.20 | 34.33 | 0.40 | 27.02 | 105 | 0.86 |
| 270 | 8.18 | 34.22 | 1.44 | 139 | | | | | | | |
| 368 | 7.10 | 34.23 | 0.82 | 124 | | | | | | | |
| 468 | 6.41 | 34.31 | 0.47 | 109 | | | | | | | |
| 575 | 5.70 | 34.34 | 0.36 | 98 | | | | | | | |
| CREST; August 11, 1952; 1404 GCT; 30°25.5'N, 116°11'W; sounding, 220 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 43°. | | | | | | | | | | | 107.32 |
| 0 | 16.29 | 33.33 | 5.17 | 352 | 0 | 16.29 | 33.33 | 5.17 | 24.42 | 352 | 0.00 |
| 7 | 16.20 | 33.33 | 4.49 | 350 | 10 | 15.80 | 33.33 | 4.52 | 24.53 | 341 | 0.03 |
| 18 | 14.92 | 33.30 | 5.04 | 325 | 20 | 14.55 | 33.30 | 5.03 | 24.78 | 318 | 0.07 |
| 36 | 11.56 | 33.31 | 4.30 | 261 | 30 | 11.70 | 33.30 | 4.68 | 25.35 | 264 | 0.10 |
| 55 | 10.36 | 33.62 | 3.16 | 217 | 50 | 11.10 | 33.53 | 3.49 | 25.63 | 236 | 0.15 |
| 73 | 10.08 | 33.89 | 2.11 | 193 | 75 | 10.09 | 33.90 | 2.07 | 26.10 | 192 | 0.20 |
| 114 | 10.24 | 34.05 | 1.34 | 184 | 100 | 10.16 | 34.00 | 1.46 | 26.16 | 186 | 0.25 |
| 153 | 10.52 | 34.16 | 1.06 | 180 | 150 | 10.51 | 34.15 | 1.10 | 26.22 | 181 | 0.34 |
| 191 | 10.18 | 34.34 | 0.82 | 161 | 200 | 10.11 | 34.37 | 0.76 | 26.46 | 158 | 0.43 |
| 238 | 9.95 | 34.42 | 0.58 | 151 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **107.35** | CREST; August 11, 1952; 1616, 1652 GCT; 30°20'N, 116°20'W; sounding, 940 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 20°, 30°. | | | | | | | | | | |
| 0 | 18.79 | 33.44 | 5.22 | 401 | 0 | 18.79 | 33.44 | 5.22 | 23.90 | 401 | 0.00 |
| 9 | 18.91 | 33.46 | 4.64 | 403 | 10 | 18.91 | 33.46 | 4.64 | 23.89 | 403 | 0.04 |
| 24 | 18.93 | 33.44 | 5.31 | 404 | 20 | 18.92 | 33.45 | 5.29 | 23.88 | 403 | 0.08 |
| 38 | 16.84 | 33.35 | 4.95 | 363 | 30 | 18.89 | 33.41 | 5.25 | 23.86 | 406 | 0.12 |
| 56 | 12.12 | 33.24 | 4.35 | 276 | 50 | 13.78 | 33.26 | 4.38 | 24.91 | 305 | 0.19 |
| 70 | 10.89 | 33.22 | 4.22 | 256 | 75 | 10.70 | 33.23 | 4.05 | 25.47 | 252 | 0.26 |
| 88 | 10.34 | 33.37 | 3.72 | 235 | 100 | 9.96 | 33.54 | 3.51 | 25.84 | 217 | 0.32 |
| 109 | 9.80 | 33.62 | 3.30 | 208 | 150 | 9.54 | 33.93 | 2.56 | 26.21 | 181 | 0.42 |
| 135 | 9.74 | 33.91 | 2.65 | 186 | 200 | 8.46 | 34.04 | 2.21 | 26.47 | 157 | 0.51 |
| 159 | 9.32 | 33.93 | 2.51 | 178 | 250 | 8.01 | 34.13 | 1.92 | 26.61 | 144 | 0.59 |
| 211 | 8.30 | 34.07 | 2.06 | 152 | 300 | 7.56 | 34.14 | 1.62 | 26.68 | 137 | 0.66 |
| | | | | | 400 | 7.12 | 34.25 | 0.82 | 26.83 | 123 | 0.79 |
| 262 | 7.93 | 34.14 | 1.87 | 142 | 500 | 6.62 | 34.35 | 0.45 | 26.98 | 109 | 0.92 |
| 315 | 7.42 | 34.14 | 1.47 | 135 | 600 | 5.99 | 34.35 | 0.32 | 27.06 | 101 | 1.03 |
| 418 | 7.07 | 34.27 | 0.74 | 120 | | | | | | | |
| 530 | 6.42 | 34.36 | 0.39 | 105 | | | | | | | |
| 643 | 5.75 | 34.34 | 0.31 | 99 | | | | | | | |
| **107.40** | CREST; August 11, 1952; 1953, 2019 GCT; 30°10.5'N, 116°43.5'W; sounding, 1430 fm; wind, 340°, force 3; weather, overcast; sea, rough; wire angle, 17°, 25°. | | | | | | | | | | |
| 0 | 18.90 | 33.42 | 5.70 | 405 | 0 | 18.90 | 33.42 | 5.70 | 23.86 | 405 | 0.00 |
| 10 | 18.90 | 33.42 | 5.44 | 405 | 10 | 18.90 | 33.42 | 5.44 | 23.86 | 405 | 0.04 |
| 19 | 18.92 | 33.40 | 5.44 | 407 | 20 | 18.92 | 33.40 | 5.45 | 23.84 | 407 | 0.08 |
| 33 | 15.66 | 33.19 | 6.00 | 349 | 30 | 16.60 | 33.23 | 5.95 | 24.27 | 366 | 0.12 |
| 53 | 13.80 | 33.12 | 5.45 | 316 | 50 | 14.15 | 33.12 | 5.47 | 24.73 | 323 | 0.19 |
| 68 | 12.50 | 33.13 | 5.75 | 291 | 75 | 11.90 | 33.13 | 5.50 | 25.18 | 280 | 0.26 |
| 80 | 11.55 | 33.12 | 5.18 | 274 | 100 | 10.42 | 33.20 | 4.59 | 25.50 | 249 | 0.33 |
| 104 | 10.24 | 33.24 | 4.48 | 243 | 150 | 9.06 | 33.80 | 3.39 | 26.19 | 183 | 0.44 |
| 126 | 9.39 | 33.55 | 3.91 | 207 | 200 | 8.47 | 34.06 | 2.65 | 26.49 | 155 | 0.53 |
| 153 | 9.01 | 33.82 | 3.29 | 181 | 250 | 8.09 | 34.13 | 1.91 | 26.60 | 145 | 0.60 |
| 203 | 8.42 | 34.07 | 2.63 | 154 | 300 | 8.02 | 34.32 | 0.82 | 26.76 | 130 | 0.68 |
| 257 | 8.06 | 34.14 | 1.70 | 144 | 400 | 7.40 | 34.36 | 0.51 | 26.88 | 118 | 0.80 |
| | | | | | 500 | 6.52 | 34.33 | 0.38 | 26.98 | 109 | 0.93 |
| 285 | 8.05 | 34.29 | 0.90 | 132 | 600 | (5.90) | (34.33) | (0.41) | (27.06) | (101) | (1.04) |
| 386 | 7.52 | 34.36 | 0.57 | 120 | | | | | | | |
| 487 | 6.63 | 34.33 | 0.38 | 110 | | | | | | | |
| 593 | 5.94 | 34.33 | 0.41 | 102 | | | | | | | |
| **110.33** | CREST; August 12, 1952; 2334 GCT; 29°50.5'N, 115°52'W; sounding, 27 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 13.90 | 33.44 | 4.83 | 294 | 0 | 13.90 | 33.44 | 4.83 | 25.02 | 294 | 0.00 |
| 10 | 12.23 | 33.24 | 4.91 | 278 | 10 | 12.23 | 33.24 | 4.91 | 25.20 | 278 | 0.03 |
| 20 | 11.36 | 33.46 | 3.84 | 246 | 20 | 11.36 | 33.46 | 3.84 | 25.53 | 246 | 0.05 |
| 30 | 11.10 | 33.58 | 3.82 | 233 | 30 | 11.10 | 33.58 | 3.82 | 25.67 | 233 | 0.08 |
| **110.35** | CREST; August 12, 1952; 2105, 2136 GCT; 29°46.5'N, 116°00'W; sounding, 700 fm; wind, 260°, force 4; weather, overcast; sea, moderate; wire angle, 22°, missing. | | | | | | | | | | |
| 0 | 15.97 | 33.36 | 5.54 | 343 | 0 | 15.97 | 33.36 | 5.54 | 24.51 | 343 | 0.00 |
| 9 | 14.44 | 33.42 | 5.52 | 307 | 10 | 14.38 | 33.42 | 5.52 | 24.91 | 305 | 0.03 |
| 18 | 14.00 | 33.42 | 5.54 | 298 | 20 | 13.90 | 33.42 | 5.52 | 25.01 | 296 | 0.06 |
| 32 | 11.65 | 33.55 | 4.13 | 244 | 30 | 12.00 | 33.52 | 4.49 | 25.46 | 253 | 0.09 |
| 46 | 11.17 | 33.66 | 3.23 | 228 | 50 | 11.08 | 33.68 | 3.08 | 25.75 | 225 | 0.14 |
| 59 | 10.90 | 33.71 | 2.87 | 220 | 75 | 10.47 | 33.77 | 2.40 | 25.93 | 208 | 0.19 |
| 71 | 10.60 | 33.75 | 2.54 | 212 | 100 | 10.18 | 33.86 | 1.74 | 26.05 | 197 | 0.24 |
| 87 | 10.19 | 33.84 | 1.72 | 198 | 150 | 10.50 | 34.28 | 1.29 | 26.32 | 171 | 0.34 |
| 107 | 10.18 | 33.87 | 1.76 | 196 | 200 | 10.81 | 34.40 | 0.72 | 26.36 | 167 | 0.42 |
| 130 | 10.27 | 34.05 | 1.45 | 184 | 250 | 9.94 | 34.35 | 1.09 | 26.47 | 156 | 0.51 |
| | | | | | 300 | 9.40 | 34.36 | 0.90 | 26.57 | 147 | 0.59 |
| 171 | 10.72 | 34.42u | 1.09 | | 400 | 8.59 | 34.41 | 0.42 | 26.74 | 131 | 0.73 |
| 213 | 10.82 | 34.38 | 0.63 | 169 | 500 | 7.29 | 34.35 | 0.33 | 26.89 | 117 | 0.86 |
| 257 | 9.78 | 34.34 | 1.11 | 155 | | | | | | | |
| 351 | 9.05 | 34.42 | 0.58 | 137 | | | | | | | |
| 446 | 8.01 | 34.38 | 0.36 | 125 | | | | | | | |
| 548 | 6.70 | 34.34 | 0.32 | 110 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; August 12, 1952; 1745 GCT; 29°36.5'N, 116°19.5'W; sounding, 1250 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 10°. 110.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.94 | 33.46 | 4.45 | 403 | 0 | 18.94 | 33.46 | 4.45 | 23.88 | 403 | 0.00 |
| 10 | 18.92 | 33.49 | 5.05 | 401 | 10 | 18.92 | 33.49 | 5.05 | 23.91 | 401 | 0.04 |
| 20 | 15.72 | 33.28 | 5.76 | 343 | 20 | 15.72 | 33.28 | 5.76 | 24.51 | 343 | 0.08 |
| 34 | 14.24 | 33.21 | 5.56 | 318 | 30 | 14.60 | 33.22 | 5.65 | 24.71 | 325 | 0.11 |
| 49 | 12.87 | 33.21 | 5.27 | 292 | 50 | 12.77 | 33.21 | 5.25 | 25.07 | 290 | 0.17 |
| 64 | 11.81 | 33.24 | 4.77 | 270 | 75 | 11.25 | 33.29 | 4.53 | 25.42 | 257 | 0.24 |
| 78 | 11.10 | 33.31 | 4.50 | 253 | 100 | 10.38 | 33.61 | 3.67 | 25.82 | 218 | 0.30 |
| 97 | 10.42 | 33.55 | 3.88 | 223 | 150 | 9.47 | 33.92 | 2.68 | 26.22 | 181 | 0.40 |
| 120 | 10.23 | 33.82 | 2.83 | 200 | 200 | 9.27 | 34.19 | 1.57 | 26.46 | 158 | 0.49 |
| 147 | 9.50 | 33.91 | 2.71 | 182 | 250 | 9.13 | 34.34 | 0.98 | 26.60 | 145 | 0.57 |
| 194 | 9.28 | 34.16 | 1.88 | 160 | 300 | 8.54 | 34.34 | 0.92 | 26.69 | 136 | 0.64 |
| 238 | 9.19 | 34.34 | 0.98 | 145 | 400 | 7.97 | 34.40 | 0.39 | 26.83 | 123 | 0.77 |
| 283 | 8.69 | 34.34 | 0.98 | 138 | 500 | 6.68 | 34.38 | 0.32 | 27.00 | 107 | 0.90 |
| 381 | 8.12 | 34.40 | 0.41 | 125 | | | | | | | |
| 475 | 6.97 | 34.38 | 0.34 | 111 | | | | | | | |
| 579 | 6.06 | 34.42 | 0.30 | 96 | | | | | | | |

CREST; August 12, 1952; 1227 GCT; 29°17'N, 116°59'W; sounding, 1600 fm; wind, 330°, force 5; weather, overcast; sea, rough; wire angle, 15°. 110.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.68 | 33.37 | 5.36 | 404 | 0 | 18.68 | 33.37 | 5.36 | 23.88 | 404 | 0.00 |
| 10 | 18.68 | 33.39 | 5.10 | 402 | 10 | 18.68 | 33.39 | 5.10 | 23.89 | 402 | 0.04 |
| 24 | 18.67 | 33.37 | 5.26 | 403 | 20 | 18.67 | 33.38 | 5.20 | 23.89 | 403 | 0.08 |
| 48 | 16.06 | 33.31 | 5.58 | 348 | 30 | 18.64 | 33.36 | 5.39 | 23.88 | 403 | 0.12 |
| 72 | 13.05 | 33.22 | 5.15 | 294 | 50 | 15.77 | 33.31 | 5.55 | 24.52 | 342 | 0.20 |
| 95 | 10.82 | 33.46 | 4.34 | 237 | 75 | 12.80 | 33.23 | 5.05 | 25.08 | 289 | 0.28 |
| 146 | 10.36 | 33.96 | 2.41 | 192 | 100 | 10.78 | 33.53 | 4.14 | 25.69 | 231 | 0.34 |
| 191 | 10.20 | 34.27 | 1.56 | 167 | 150 | 10.58 | 34.00 | 2.30 | 26.09 | 193 | 0.45 |
| 237 | 10.43 | 34.52 | 0.63 | 152 | 200 | 10.20 | 34.35 | 1.39 | 26.43 | 161 | 0.54 |
| 283 | 9.02 | 34.29 | 1.35 | 147 | 250 | 10.00 | 34.50 | 0.71 | 26.58 | 146 | 0.62 |
| 379 | 8.36 | 34.43 | 0.48 | 126 | 300 | 8.83 | 34.31 | 1.23 | 26.63 | 142 | 0.69 |
| 471 | 7.95 | 34.45 | 0.28 | 119 | 400 | 8.27 | 34.44 | 0.39 | 26.81 | 124 | 0.83 |
| 568 | 6.85 | 34.42 | 0.27 | 106 | 500 | 7.70 | 34.44 | 0.27 | 26.90 | 116 | 0.96 |
| 758 | 5.19 | 34.38 | 0.39 | 89 | 600 | 6.61 | 34.41 | 0.28 | 27.03 | 104 | 1.08 |
| 949 | 4.54 | 34.43 | 0.72 | 79 | 700 | 5.62 | 34.39 | 0.32 | 27.14 | 93 | 1.19 |
| 1151 | 3.78 | 34.54 | 0.41 | 63 | 800 | 5.04 | 34.38 | 0.46 | 27.20 | 88 | 1.29 |
| | | | | | 1000 | 4.37 | 34.45 | 0.70 | 27.33 | 75 | 1.47 |

CREST; August 12, 1952; 0714 GCT; 28°56'N, 117°39'W; sounding, 1840 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 10°. 110.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.58 | 33.39 | 4.99 | 424 | 0 | 19.58 | 33.39 | 4.99 | 23.67 | 424 | 0.00 |
| 9 | 19.58 | 33.39 | 5.29 | 424 | 10 | 19.58 | 33.39 | 5.28 | 23.67 | 424 | 0.04 |
| 20 | 19.60 | 33.37 | 5.18 | 426 | 20 | 19.60 | 33.37 | 5.18 | 23.64 | 426 | 0.08 |
| 35 | 18.60 | 33.31 | 5.58 | 406 | 30 | 19.60 | 33.34 | 5.51 | 23.62 | 428 | 0.13 |
| 55 | 15.10 | 33.24 | 5.77 | 333 | 50 | 16.00 | 33.25 | 5.70 | 24.42 | 352 | 0.21 |
| 69 | 13.41 | 33.28 | 5.83 | 297 | 75 | 12.70 | 33.31 | 5.75 | 25.16 | 281 | 0.29 |
| 84 | 11.92 | 33.35 | 4.96 | 264 | 100 | 10.73 | 33.53 | 3.75 | 25.70 | 230 | 0.35 |
| 107 | 10.58 | 33.69 | 3.30 | 216 | 150 | 10.97 | 34.28 | 1.28 | 26.24 | 179 | 0.45 |
| 129 | 11.06 | 34.10 | 1.61 | 194 | 200 | 10.07 | 34.45 | 1.03 | 26.53 | 151 | 0.54 |
| 156 | 10.90 | 34.31 | 1.24 | 175 | 250 | 9.62 | 34.45 | 0.82 | 26.61 | 144 | 0.61 |
| 206 | 9.98 | 34.45 | 1.02 | 150 | 300 | 9.41 | 34.49 | 0.50 | 26.67 | 138 | 0.69 |
| 259 | 9.58 | 34.45 | 0.74 | 143 | 400 | 7.72 | 34.31 | 0.62 | 26.79 | 126 | 0.83 |
| 306 | 9.36 | 34.49 | 0.49 | 137 | 500 | 6.72 | 34.33 | 0.59 | 26.95 | 111 | 0.95 |
| 414 | 7.51 | 34.29 | 0.65 | 125 | 600 | 5.88 | 34.34 | 0.36 | 27.07 | 100 | 1.06 |
| 519 | 6.58 | 34.34 | 0.55 | 109 | | | | | | | |
| 627 | 5.66 | 34.34 | 0.34 | 98 | | | | | | | |

| | OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 113.30 | CREST; August 13, 1952; 0405 GCT; 29°22.5'N, 115°18'W; sounding, 38 fm; wind, 300°, force 6; weather, clear; sea, moderate; wire angle, 15°. a) | | | | | | | | | | | |
| | 0 | 12.62 | 33.58 | 3.43 | 260 | 0 | 12.62 | 33.58 | 3.43 | 25.39 | 260 | 0.00 |
| | 10 | 12.54 | 33.62 | 3.88 | 255 | 10 | 12.54 | 33.62 | 3.88 | 25.43 | 255 | 0.03 |
| | 19 | 11.76 | 33.62 | 3.44 | 241 | 20 | 11.65 | 33.62 | 3.42 | 25.60 | 239 | 0.05 |
| | 29 | 11.14 | 33.62 | 3.41 | 230 | | | | | | | |
| 113.40 | CREST; August 13, 1952; 0908 GCT; 29°02'N, 115°58'W; sounding, 980 fm; wind, 320°, force 5; weather, overcast; sea, moderate; wire angle, 35°. | | | | | | | | | | | |
| | 0 | 18.41 | 33.40 | 4.99 | 395 | 0 | 18.41 | 33.40 | 4.99 | 23.97 | 395 | 0.00 |
| | 8 | 18.41 | 33.39 | 5.76 | 396 | 10 | 18.40 | 33.39 | 5.75 | 23.96 | 395 | 0.04 |
| | 16 | 18.27 | 33.35 | 5.42 | 395 | 20 | 17.23 | 33.30 | 5.45 | 24.18 | 375 | 0.08 |
| | 28 | 16.01 | 33.21 | 5.54 | 355 | 30 | 15.76 | 33.20 | 5.61 | 24.44 | 350 | 0.11 |
| | 45 | 14.47 | 33.17 | 5.78 | 326 | 50 | 14.18 | 33.15 | 5.95 | 24.74 | 321 | 0.18 |
| | 57 | 13.43 | 33.12 | 6.06 | 309 | 75 | 12.05 | 33.19 | 5.79 | 25.20 | 278 | 0.26 |
| | 69 | 12.46 | 33.17 | 5.81 | 287 | 100 | 10.22 | 33.26 | 5.57 | 25.58 | 242 | 0.32 |
| | 89 | 10.82 | 33.21 | 5.79 | 255 | 150 | 9.21 | 33.82 | 3.44 | 26.18 | 184 | 0.43 |
| | 108 | 9.96 | 33.31 | 4.40 | 234 | 200 | 8.70 | 34.02 | 2.89 | 26.42 | 162 | 0.52 |
| | 130 | 9.55 | 33.64 | 3.66 | 203 | 250 | 8.58 | 34.16 | 1.71 | 26.55 | 150 | 0.60 |
| | 168 | 8.96 | 33.93 | 3.30 | 172 | 300 | 8.06 | 34.20 | 1.31 | 26.66 | 139 | 0.67 |
| | 212 | 8.63 | 34.05 | 2.57 | 159 | 400 | 6.96 | 34.25 | 0.87 | 26.85 | 120 | 0.81 |
| | 250 | 8.58 | 34.16 | 1.71 | 150 | 500 | 6.48 | 34.34 | 0.33 | 26.99 | 108 | 0.93 |
| | 340 | 7.46 | 34.22 | 1.11 | 129 | | | | | | | |
| | 435 | 6.74 | 34.27 | 0.67 | 116 | | | | | | | |
| | 537 | 6.37 | 34.38 | 0.25 | 103 | | | | | | | |
| 117.26 | CREST; August 13, 1952; 2103 GCT; 28°56'N, 114°41'W; sounding, 45 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | | |
| | 0 | 15.86 | 33.54 | 4.48 | 327 | 0 | 15.86 | 33.54 | 4.48 | 24.68 | 327 | 0.00 |
| | 10 | 15.40 | 33.53 | 4.61 | 318 | 10 | 15.40 | 33.53 | 4.61 | 24.77 | 318 | 0.03 |
| | 20 | 12.64 | 33.58 | 3.25 | 260 | 20 | 12.64 | 33.58 | 3.25 | 25.38 | 260 | 0.06 |
| | 30 | 11.54 | 33.60 | 3.30 | 239 | 30 | 11.54 | 33.60 | 3.30 | 25.61 | 239 | 0.09 |
| | 50 | 10.35 | 33.78 | 1.51 | 205 | 50 | 10.35 | 33.78 | 1.51 | 25.96 | 205 | 0.13 |
| 117.30 | CREST; August 13, 1952; 1840 GCT; 28°47'N, 114°55.5'W; sounding, 55 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | |
| | 0 | 15.45 | 33.42 | 5.68 | 327 | 0 | 15.45 | 33.42 | 5.68 | 24.68 | 327 | 0.00 |
| | 10 | 15.03 | 33.37 | 5.67 | 322 | 10 | 15.03 | 33.37 | 5.67 | 24.73 | 322 | 0.03 |
| | 20 | 12.54 | 33.28 | 5.02 | 280 | 20 | 12.54 | 33.28 | 5.02 | 25.17 | 280 | 0.06 |
| | 30 | 12.22 | 33.24 | 4.75 | 277 | 30 | 12.22 | 33.24 | 4.75 | 25.20 | 277 | 0.09 |
| | 50 | 11.04 | 33.39 | 3.70 | 246 | 50 | 11.04 | 33.39 | 3.70 | 25.54 | 246 | 0.14 |
| | 75 | 10.54 | 33.82 | 5.17 | 205 | 75 | 10.54 | 33.82 | 5.17 | 25.96 | 205 | 0.20 |
| 117.40 | CREST; August 13, 1952; 1342 GCT; 28°28'N, 115°35.5'W; sounding, 500 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 07°. | | | | | | | | | | | |
| | 0 | 15.49 | 33.26 | 5.24 | 340 | 0 | 15.49 | 33.26 | 5.24 | 24,54 | 340 | 0.00 |
| | 10 | 15.46 | 33.26 | 5.76 | 339 | 10 | 15.46 | 33.26 | 5.76 | 24.55 | 339 | 0.03 |
| | 20 | 13.72 | 33.15 | 5.85 | 312 | 20 | 13.72 | 33.15 | 5.85 | 24.84 | 312 | 0.07 |
| | 36 | 13.26 | 33.42 | 4.58 | 283 | 30 | 13.31 | 33.29 | 5.10 | 25.03 | 294 | 0.10 |
| | 50 | 13.29 | 33.48 | 4.82 | 280 | 50 | 13.29 | 33.48 | 4.82 | 25.18 | 280 | 0.15 |
| | 65 | 12.79 | 33.49 | 4.92 | 269 | 75 | 12.35 | 33.49 | 3.20 | 25.37 | 261 | 0.22 |
| | 79 | 12.24 | 33.49 | 2.73 | 259 | 100 | 10.92 | 33.82 | 1.53 | 25.89 | 212 | 0.28 |
| | 99 | 10.93 | 33.77 | 1.60 | 216 | 150 | 11.50 | 34.42 | 0.38 | 26.25 | 178 | 0.38 |
| | 124 | 11.06 | 34.18 | 0.57 | 188 | 200 | 11.45 | 34.56 | 0.34 | 26.37 | 166 | 0.47 |
| | 154 | 11.54 | 34.45 | 0.36 | 176 | | | | | | | |
| | 201 | 11.44 | 34.56 | 0.35 | 166 | | | | | | | |
| | 243p | 11.08 | 34.60 | 0.52 | 157 | | | | | | | |
| | 289p | 9.45 | 34.43 | 0.42 | 143 | | | | | | | |
| | 367p | 8.69 | 34.43 | 0.30 | 131 | | | | | | | |
| | 462p | 7.91 | 34.40 | 0.27 | 122 | | | | | | | |
| | 546p | 6.65 | 34.38 | 0.00 | 107 | | | | | | | |

a) Stations 113.30, 117.30, 117.40 and 120.25 were occupied also by RV Spencer F. Baird during a special current study in Sebastián Vizcaino Bay. The stations appear at the end of CCOFI Cruise 5208 on pages 300 to 303. The RV E. W. Scripps also collected data for this special study of the Bay; see pages 296 to 300.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; August 14, 1952; 0208 GCT; 28°23'N, 114°15'W; sounding, 30 fm; wind, 310°, force 5; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | | | 120.25 |
| 0 | 17.39 | 33.53 | 5.42 | 362 | 0 | 17.39 | 33.53 | 5.42 | 24.32 | 362 | 0.00 |
| 10 | 17.38 | 33.55 | 5.42 | 360 | 10 | 17.38 | 33.55 | 5.42 | 24.33 | 360 | 0.04 |
| 20 | 14.28 | 33.55 | 5.65 | 294 | 20 | 14.28 | 33.55 | 5.65 | 25.03 | 294 | 0.07 |
| 30 | 11.64 | 33.60 | 3.51 | 241 | 30 | 11.64 | 33.60 | 3.51 | 25.59 | 241 | 0.10 |
| CREST; August 15, 1952; 0623 GCT; 27°43'N, 115°33'W; sounding, 1200 fm; wind, 010°, force 3; weather, clear; sea, slight; wire angle, 25°. | | | | | | | | | | | 120.45 |
| 0 | 17.94 | 33.53 | 5.20 | 375 | 0 | 17.94 | 33.53 | 5.20 | 24.18 | 375 | 0.00 |
| 9 | 17.93 | 33.53 | 4.67 | 374 | 10 | 17.92 | 33.53 | 4.68 | 24.19 | 374 | 0.04 |
| 23 | 14.43 | 33.35 | 5.65 | 312 | 20 | 15.55 | 33.36 | 5.61 | 24.61 | 334 | 0.07 |
| 45 | 11.71 | 33.35 | 4.13 | 260 | 30 | 13.57 | 33.35 | 5.59 | 25.02 | 295 | 0.10 |
| 67 | 11.24 | 33.60 | 3.02 | 234 | 50 | 11.56 | 33.36 | 3.80 | 25.42 | 257 | 0.16 |
| 88 | 11.44 | 33.98 | 1.79 | 209 | 75 | 11.28 | 33.79 | 2.55 | 25.80 | 220 | 0.22 |
| 133 | 12.03 | 34.43 | 0.40 | 186 | 100 | 12.15 | 34.14 | 1.18 | 25.91 | 210 | 0.27 |
| 175 | 11.71 | 34.58 | 0.30 | 170 | 150 | 11.90 | 34.51 | 0.35 | 26.25 | 178 | 0.37 |
| 218 | 11.31 | 34.58 | 0.23 | 163 | 200 | 11.50 | 34.58 | 0.26 | 26.38 | 166 | 0.46 |
| 259 | 10.80 | 34.61 | 0.29 | 152 | 250 | 10.92 | 34.61 | 0.28 | 26.51 | 154 | 0.54 |
| 347 | 9.64 | 34.58 | 0.20 | 135 | 300 | 10.25 | 34.61 | 0.24 | 26.62 | 142 | 0.62 |
| 434 | 8.42 | 34.47 | 0.24 | 124 | 400 | 8.91 | 34.51 | 0.22 | 26.77 | 129 | 0.76 |
| 523 | 7.30 | 34.43 | 0.26 | 112 | 500 | 7.58 | 34.43 | 0.25 | 26.91 | 115 | 0.89 |
| 705 | 5.41 | 34.43 | 0.30 | 88 | 600 | 6.40 | 34.43 | 0.27 | 27.07 | 100 | 1.01 |
| 889 | 4.42 | 34.45 | 0.47 | 76 | 700 | 5.46 | 34.43 | 0.30 | 27.19 | 89 | 1.11 |
| 1086 | 3.82 | 34.47 | 0.68 | 68 | 800 | 4.83 | 34.43 | 0.38 | 27.26 | 82 | 1.20 |
| | | | | | 1000 | 4.07 | 34.47 | 0.58 | 27.38 | 71 | 1.38 |
| CREST; August 15, 1952; 1005 GCT; 27°33.5'N, 115°56'W; sounding, 2000 fm; wind, 040°, force 3; weather, clear; sea, slight; wire angle, 25°. | | | | | | | | | | | 120.50 |
| 0 | 19.37 | 33.51 | 4.93 | 410 | 0 | 19.37 | 33.51 | 4.93 | 23.81 | 410 | 0.00 |
| 9 | 19.36 | 33.53 | 4.99 | 408 | 10 | 19.33 | 33.53 | 5.00 | 23.84 | 408 | 0.04 |
| 18 | 18.85 | 33.53 | 5.18 | 396 | 20 | 18.50 | 33.53 | 5.17 | 24.04 | 388 | 0.08 |
| 32 | 13.70 | 33.48 | 5.07 | 288 | 30 | 15.85 | 33.49 | 5.11 | 24.64 | 331 | 0.12 |
| 50 | 11.78 | 33.44 | 3.63 | 255 | 50 | 11.78 | 33.44 | 3.63 | 25.44 | 255 | 0.18 |
| 64 | 11.27 | 33.53 | 3.61 | 239 | 75 | 10.65 | 33.60 | 3.58 | 25.77 | 224 | 0.24 |
| 77 | 10.55 | 33.60 | 3.53 | 222 | 100 | 10.68 | 33.97 | 2.14 | 26.05 | 197 | 0.29 |
| 98 | 10.66 | 33.95 | 2.17 | 198 | 150 | 11.32 | 34.55 | 0.64 | 26.39 | 165 | 0.38 |
| 120 | 10.10 | 34.02 | 2.01 | 183 | 200 | 10.79 | 34.65 | 0.26 | 26.56 | 148 | 0.46 |
| 146 | 11.32 | 34.51 | 0.74 | 168 | 250 | 10.30 | 34.65 | 0.23 | 26.65 | 140 | 0.54 |
| 193 | 10.86 | 34.65 | 0.27 | 150 | 300 | 9.36 | 34.51 | 0.30 | 26.70 | 135 | 0.61 |
| 244 | 10.37 | 34.65 | 0.22 | 141 | 400 | 8.29 | 34.51 | 0.23 | 26.87 | 119 | 0.74 |
| 289 | 9.54 | 34.51 | 0.29 | 138 | 500 | 6.92 | 34.44 | 0.22 | 27.01 | 106 | 0.86 |
| 390 | 8.40 | 34.51 | 0.22 | 121 | 600 | (5.97) | (34.38) | (0.25) | (27.09) | (98) | (0.97) |
| 490 | 7.04 | 34.45 | 0.22 | 107 | | | | | | | |
| 596 | 6.00 | 34.38 | 0.25 | 99 | | | | | | | |
| CREST; August 15, 1952; 1455 GCT; 27°16'N, 116°31.5'W; sounding, 1950 fm; wind, 010°, force 3; weather, partly cloudy; sea, moderate; wire angle, 09°. | | | | | | | | | | | 120.60 |
| 0 | 19.62 | 33.60 | 4.86 | 410 | 0 | 19.62 | 33.60 | 4.86 | 23.81 | 410 | 0.00 |
| 10 | 19.60 | 33.58 | 5.37 | 411 | 10 | 19.60 | 33.58 | 5.37 | 23.80 | 411 | 0.04 |
| 24 | 17.06 | 33.49 | 6.05 | 357 | 20 | 18.40 | 33.49 | 5.98 | 24.04 | 388 | 0.08 |
| 49 | 12.64 | 33.66 | 4.16 | 254 | 30 | 15.25 | 33.51 | 6.04 | 24.79 | 317 | 0.12 |
| 74 | 10.82 | 33.71 | 3.36 | 218 | 50 | 12.59 | 33.66 | 4.13 | 25.46 | 253 | 0.17 |
| 98 | 10.44 | 33.93 | 2.66 | 196 | 75 | 10.80 | 33.72 | 3.35 | 25.84 | 217 | 0.23 |
| 149 | 10.37 | 34.34 | 1.37 | 164 | 100 | 10.43 | 33.96 | 2.62 | 26.09 | 193 | 0.28 |
| 195 | 9.06 | 34.25 | 1.84 | 150 | 150 | 10.36 | 34.34 | 1.37 | 26.39 | 164 | 0.38 |
| 240 | 8.88 | 34.31 | 1.19 | 143 | 200 | 9.02 | 34.25 | 1.81 | 26.55 | 150 | 0.46 |
| 287 | 9.41 | 34.56 | 0.29 | 133 | 250 | 8.96 | 34.37 | 0.93 | 26.65 | 140 | 0.53 |
| 383 | 7.66 | 34.43 | 0.34 | 116 | 300 | 9.40 | 34.55 | 0.27 | 26.72 | 133 | 0.60 |
| 476 | 6.90 | 34.47 | 0.26 | 103 | 400 | 7.43 | 34.43 | 0.33 | 26.93 | 113 | 0.73 |
| 571 | 6.26 | 34.45 | 0.18 | 97 | 500 | 6.73 | 34.47 | 0.21 | 27.06 | 101 | 0.84 |
| 759 | 5.12 | 34.43 | 0.27 | 85 | 600 | 6.07 | 34.44 | 0.19 | 27.12 | 95 | 0.95 |
| 948 | 4.29 | 34.52 | 0.40 | 69 | 700 | 5.44 | 34.43 | 0.22 | 27.19 | 88 | 1.05 |
| 1150 | 3.70 | 34.51 | 0.67 | 64 | 800 | 4.93 | 34.45 | 0.29 | 27.27 | 81 | 1.14 |
| | | | | | 1000 | 4.10 | 34.52 | 0.46 | 27.42 | 67 | 1.31 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **120.70** | CREST; August 15, 1952; 1903 GCT; 26°54'N, 117°10'W; sounding, 2000 fm; wind, 040°, force 4; weather, partly cloudy; sea, moderate; wire angle, 21°. | | | | | | | | | | |
| 0 | 19.10 | 33.37 | 5.50 | 414 | 0 | 19.10 | 33.37 | 5.50 | 23.77 | 414 | 0.00 |
| 9 | 18.82 | 33.39 | 5.35 | 405 | 10 | 18.65 | 33.39 | 5.36 | 23.90 | 401 | 0.04 |
| 18 | 17.97 | 33.37 | 5.56 | 387 | 20 | 17.81 | 33.36 | 5.55 | 24.08 | 384 | 0.08 |
| 32 | 16.59 | 33.30 | 5.48 | 361 | 30 | 16.80 | 33.30 | 5.49 | 24.28 | 365 | 0.12 |
| 46 | 15.45 | 33.31 | 5.89 | 335 | 50 | 15.28 | 33.31 | 5.87 | 24.63 | 332 | 0.19 |
| 59 | 14.76 | 33.31 | 5.80 | 321 | 75 | 13.40 | 33.26 | 6.23 | 24.99 | 298 | 0.27 |
| 71 | 13.62 | 33.28 | 6.25 | 301 | 100 | 10.90 | 33.23 | 5.05 | 25.44 | 255 | 0.34 |
| 87 | 11.75 | 33.21 | 5.43 | 271 | 150 | 9.55 | 33.75 | 3.98 | 26.07 | 195 | 0.45 |
| 107 | 10.49 | 33.28 | 4.88 | 245 | 200 | 9.41 | 34.14 | 1.92 | 26.40 | 164 | 0.54 |
| 129 | 10.06 | 33.53 | 4.39 | 219 | 250 | 8.98 | 34.29 | 1.32 | 26.59 | 146 | 0.62 |
| 168 | 9.15 | 33.87 | 3.52 | 180 | 300 | 8.52 | 34.31 | 0.95 | 26.67 | 138 | 0.69 |
| 207 | 9.48 | 34.18 | 1.83 | 162 | 400 | 7.68 | 34.39 | 0.45 | 26.86 | 120 | 0.83 |
| 248 | 9.02 | 34.29 | 1.36 | 147 | 500 | 6.76 | 34.36 | 0.38 | 26.97 | 110 | 0.95 |
| 334 | 8.23 | 34.33 | 0.73 | 132 | | | | | | | |
| 421 | 7.50 | 34.40 | 0.39 | 116 | | | | | | | |
| 519 | 6.54 | 34.36 | 0.37 | 107 | | | | | | | |
| **120.80** | CREST; August 15, 1952; 2354 GCT; 26°33'N, 117°48'W; sounding, 2000 fm; wind, 050°, force 4; weather, cloudy; sea, moderate; wire angle, 22°. | | | | | | | | | | |
| 0 | 20.98 | 33.48 | 3.40u | 453 | 0 | 20.98 | 33.48 | | 23.36 | 453 | 0.00 |
| 9 | 20.94 | 33.49 | 4.64 | 451 | 10 | 20.93 | 33.49 | 4.70 | 23.39 | 451 | 0.05 |
| 23 | 19.79 | 33.48 | 5.25 | 423 | 20 | 20.75 | 33.48 | 5.21 | 23.43 | 447 | 0.09 |
| 47 | 17.89 | 33.55 | 5.38 | 372 | 30 | 19.06 | 33.49 | 5.29 | 23.87 | 404 | 0.13 |
| 70 | 16.48 | 33.62 | 5.17 | 335 | 50 | 17.60 | 33.58 | 5.36 | 24.30 | 363 | 0.21 |
| 92 | 15.42 | 33.62 | 5.27 | 312 | 75 | 16.25 | 33.62 | 5.19 | 24.65 | 330 | 0.30 |
| 138 | 11.00 | 33.62 | 3.60 | 228 | 100 | 15.00 | 33.62 | 5.24 | 24.93 | 303 | 0.38 |
| 183 | 10.12 | 33.93 | 2.99 | 190 | 150 | 10.78 | 33.64 | 3.40 | 25.78 | 223 | 0.51 |
| 225 | 9.20 | 34.07 | 2.54 | 166 | 200 | 9.73 | 34.02 | 2.82 | 26.25 | 178 | 0.61 |
| 269 | 8.58 | 34.14 | 2.02 | 151 | 250 | 8.76 | 34.10 | 2.26 | 26.47 | 157 | 0.70 |
| 359 | 8.02 | 34.36 | 0.53 | 127 | 300 | 8.40 | 34.23 | 1.21 | 26.63 | 142 | 0.77 |
| 446 | 7.30 | 34.40 | 0.36 | 114 | 400 | 7.70 | 34.39 | 0.42 | 26.86 | 120 | 0.91 |
| 538 | 6.45 | 34.36 | 0.33 | 106 | 500 | 6.78 | 34.37 | 0.34 | 26.97 | 109 | 1.03 |
| 719 | 5.32 | 34.42 | 0.26 | 88 | 600 | 5.99 | 34.38 | 0.30 | 27.09 | 99 | 1.14 |
| 903 | 4.46 | 34.45 | 0.40 | 76 | 700 | 5.42 | 34.42 | 0.27 | 27.19 | 89 | 1.25 |
| 1102 | 3.82 | 34.54 | 0.63 | 63 | 800 | 4.93 | 34.43 | 0.29 | 27.25 | 83 | 1.34 |
| | | | | | 1000 | 4.13 | 34.49 | 0.50 | 27.39 | 70 | 1.51 |
| **120.90** | CREST; August 16, 1952; 0422 GCT; 26°12.5'N, 118°27'W; sounding, 2000 fm; wind, 050°, force 4; weather, clear; sea, moderate; wire angle, 09°. | | | | | | | | | | |
| 0 | 21.25 | 33.78 | 4.26 | 438 | 0 | 21.25 | 33.78 | 4.26 | 23.52 | 438 | 0.00 |
| 10 | 21.26 | 33.78 | 4.41 | 438 | 10 | 21.26 | 33.78 | 4.41 | 23.52 | 438 | 0.04 |
| 20 | 21.27 | 33.75 | 4.53 | 440 | 20 | 21.27 | 33.75 | 4.53 | 23.49 | 440 | 0.09 |
| 35 | 19.66 | 33.71 | 5.10 | 403 | 30 | 20.40 | 33.71 | 4.98 | 23.69 | 421 | 0.13 |
| 49 | 18.74 | 33.71 | 4.86 | 380 | 50 | 18.59 | 33.71 | 4.88 | 24.16 | 377 | 0.21 |
| 63 | 16.90 | 33.58 | 5.38 | 347 | 75 | 15.98 | 33.57 | 5.41 | 24.67 | 328 | 0.30 |
| 77 | 15.92 | 33.57 | 5.42 | 326 | 100 | 15.25 | 33.53 | 4.87 | 24.81 | 315 | 0.38 |
| 96 | 15.42 | 33.55 | 5.05 | 317 | 150 | 10.95 | 33.55 | 4.00 | 25.68 | 232 | 0.52 |
| 118 | 13.18 | 33.49 | 4.43 | 277 | 200 | 9.62 | 34.04 | 2.71 | 26.29 | 174 | 0.62 |
| 146 | 11.12 | 33.53 | 4.16 | 237 | 250 | 9.33 | 34.18 | 1.84 | 26.44 | 159 | 0.71 |
| 191 | 9.73 | 33.95 | 2.90 | 183 | 300 | 9.20 | 34.29 | 1.09 | 26.55 | 149 | 0.79 |
| 237 | 9.37 | 34.17 | 2.08 | 161 | 400 | 8.09 | 34.40 | 0.42 | 26.81 | 125 | 0.93 |
| 283 | 9.28 | 34.23 | 1.25 | 155 | 500 | 6.76 | 34.37 | 0.27 | 26.98 | 109 | 1.06 |
| 381 | 8.34 | 34.40 | 0.46 | 128 | 600 | (5.93) | (34.36) | | (27.08) | (99) | (1.17) |
| 477 | 7.02 | 34.38 | 0.30 | 112 | | | | | | | |
| 581 | 6.08 | 34.36 | 0.23 | 101 | | | | | | | |
| **123.37** | CREST; August 17, 1952; 0133 GCT; 27°24'N, 114°40'W; sounding, 37 fm; wind, 270°, force 3; weather, cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 17.70 | 33.49 | 5.43 | 372 | 0 | 17.70 | 33.49 | 5.43 | 24.21 | 372 | 0.00 |
| 10 | 15.92 | 33.49 | 5.64 | 332 | 10 | 15.92 | 33.49 | 5.64 | 24.63 | 332 | 0.04 |
| 20 | 14.26 | 33.40 | 5.38 | 305 | 20 | 14.26 | 33.40 | 5.38 | 24.92 | 305 | 0.07 |
| 30 | 12.66 | 33.46 | 4.57 | 269 | 30 | 12.66 | 33.46 | 4.57 | 25.29 | 269 | 0.10 |
| 50 | 12.92 | 33.96 | 1.09 | 237 | 50 | 12.92 | 33.96 | 1.09 | 25.62 | 237 | 0.15 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| CREST; August 16, 1952; 2323 GCT; 27°18'N, 114°51.5'W; sounding, 213 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | | 123.40 |
| 0 | 21.12 | 33.58 | 4.88 | 449 | 0 | 21.12 | 33.58 | 4.88 | 23.40 | 449 | 0.00 |
| 10 | 18.80 | 33.55 | 5.44 | 393 | 10 | 18.80 | 33.55 | 5.44 | 23.99 | 393 | 0.04 |
| 24 | 14.50 | 33.42 | 5.73 | 308 | 20 | 16.00 | 33.43 | 5.71 | 24.56 | 338 | 0.08 |
| 49 | 11.97 | 33.51 | 4.29 | 253 | 30 | 13.71 | 33.43 | 5.67 | 25.05 | 291 | 0.11 |
| 73 | 10.98 | 33.86 | 3.21 | 210 | 50 | 11.86 | 33.53 | 4.25 | 25.49 | 250 | 0.16 |
| 97 | 11.60 | 34.22 | 1.40 | 194 | 75 | 10.99 | 33.90 | 3.14 | 25.94 | 207 | 0.22 |
| 145 | 12.03 | 34.52 | 0.35 | 180 | 100 | 11.67 | 34.29 | 1.12 | 26.12 | 190 | 0.27 |
| 192p | 11.48 | 34.60 | 0.55 | 164 | | | | | | | |
| 238p | 10.90 | 34.60 | 0.47 | 154 | | | | | | | |
| 284p | 10.49 | 34.61 | 0.33 | 146 | | | | | | | |
| CREST; August 16, 1952; 1846 GCT; 26°58'N, 115°31'W; sounding, 1800 fm; wind, 020°, force 2; weather, partly cloudy; sea, slight; wire angle, 02°. | | | | | | | | | | | 123.50 |
| 0 | 20.62 | 33.62 | 5.00 | 433 | 0 | 20.62 | 33.62 | 5.00 | 23.57 | 433 | 0.00 |
| 10 | 18.36 | 33.57 | 4.83 | 381 | 10 | 18.36 | 33.57 | 4.83 | 24.11 | 381 | 0.04 |
| 20 | 17.69 | 33.55 | 5.43 | 367 | 20 | 17.69 | 33.55 | 5.43 | 24.26 | 367 | 0.08 |
| 35 | 13.48 | 33.33 | 5.38 | 294 | 30 | 16.50 | 33.34 | 5.40 | 24.38 | 356 | 0.11 |
| 50 | 13.00 | 33.55 | 4.76 | 269 | 50 | 13.00 | 33.55 | 4.76 | 25.29 | 269 | 0.18 |
| 64 | 12.20 | 33.78 | 2.87 | 237 | 75 | 11.10 | 33.83 | 3.08 | 25.87 | 214 | 0.24 |
| 78 | 10.90 | 33.84 | 3.10 | 210 | 100 | 10.48 | 33.97 | 2.68 | 26.09 | 193 | 0.29 |
| 98 | 10.51 | 33.96 | 2.71 | 195 | 150 | 9.45 | 34.14 | 2.02 | 26.39 | 164 | 0.38 |
| 121 | 9.82 | 34.04 | 2.60 | 178 | 200 | 9.13 | 34.37 | 1.72 | 26.62 | 142 | 0.46 |
| 149 | 9.46 | 34.14 | 2.04 | 164 | 250 | 9.33 | 34.58 | 0.34 | 26.76 | 130 | 0.53 |
| 196 | 9.12 | 34.34 | 1.79 | 144 | 300 | 9.13 | 34.53 | 0.20 | 26.75 | 130 | 0.60 |
| 243 | 9.34 | 34.58 | 0.40 | 130 | 400 | 7.91 | 34.52 | 0.21 | 26.93 | 113 | 0.72 |
| 290 | 9.22 | 34.54 | 0.20 | 131 | 500 | 6.78 | 34.49 | 0.21 | 27.07 | 100 | 0.84 |
| 390 | 8.04 | 34.52 | 0.21 | 115 | 600 | (5.95) | (34.47) | (0.18) | (27.16) | (91) | (0.94) |
| 486 | 6.92 | - | 0.22 | | | | | | | | |
| 590 | 6.04 | 34.47 | 0.19 | 92 | | | | | | | |
| CREST; August 17, 1952; 0638 GCT; 26°55'N, 114°06'W; sounding, 40 fm; wind, calm; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | 127.34 |
| 0 | 21.08 | 33.93 | 5.75 | 423 | 0 | 21.08 | 33.93 | 5.75 | 23.68 | 423 | 0.00 |
| 10 | 19.44 | 34.02 | 4.95 | 375 | 10 | 19.44 | 34.02 | 4.95 | 24.18 | 375 | 0.04 |
| 20 | 17.32 | 33.93 | 5.03 | 331 | 20 | 17.32 | 33.93 | 5.03 | 24.64 | 331 | 0.08 |
| 30 | 16.62 | 33.98 | 4.18 | 312 | 30 | 16.62 | 33.98 | 4.18 | 24.84 | 312 | 0.11 |
| 50 | 13.22 | 33.91 | 1.67 | 247 | 50 | 13.22 | 33.91 | 1.67 | 25.52 | 247 | 0.16 |
| CREST; August 17, 1952; 0930 GCT; 26°43.5'N, 114°29.5'W; sounding, 1700 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 04°. | | | | | | | | | | | 127.40 |
| 0 | 22.20 | 33.57 | 3.40 | 478 | 0 | 22.20 | 33.57 | 3.40 | 23.10 | 478 | 0.00 |
| 10 | 20.15 | 33.55 | 4.17 | 426 | 10 | 20.15 | 33.55 | 4.17 | 23.64 | 426 | 0.05 |
| 20 | 19.87 | 33.58 | 4.08 | 417 | 20 | 19.87 | 33.58 | 4.08 | 23.73 | 417 | 0.09 |
| 35 | 14.62 | 33.31 | 5.18 | 318 | 30 | 17.00 | 33.40 | 5.16 | 24.31 | 363 | 0.13 |
| 49 | 13.41 | 33.35 | 4.18 | 292 | 50 | 13.30 | 33.35 | 4.17 | 25.08 | 289 | 0.19 |
| 64 | 12.70 | 33.35 | 3.63 | 278 | 75 | 12.05 | 33.48 | 3.33 | 25.42 | 257 | 0.26 |
| 78 | 11.92 | 33.53 | 3.30 | 251 | 100 | 10.59 | 33.68 | 2.93 | 25.84 | 217 | 0.32 |
| 97 | 10.64 | 33.66 | 3.08 | 219 | 150 | 9.99 | 34.11 | 2.01 | 26.28 | 175 | 0.42 |
| 121 | 10.48 | 33.91 | 2.13 | 198 | 200 | 9.22 | 34.21 | 1.47 | 26.48 | 156 | 0.50 |
| 149 | 10.00 | 34.11 | 2.03 | 175 | 250 | 9.14 | 34.32 | 0.81 | 26.58 | 146 | 0.58 |
| 196 | 9.24 | 34.20 | 1.57 | 157 | 300 | 8.62 | 34.38 | 0.57 | 26.71 | 134 | 0.65 |
| 243 | 9.16 | 34.31 | 0.83 | 147 | 400 | 7.46 | 34.36 | 0.38 | 26.87 | 119 | 0.79 |
| 292 | 8.72 | 34.38 | 0.62 | 135 | 500 | 6.70 | 34.41 | 0.22 | 27.02 | 105 | 0.91 |
| 391 | 7.53 | 34.36 | 0.40 | 120 | 600 | (6.17) | (34.43) | (0.20) | (27.10) | (97) | (1.01) |
| 488 | 6.77 | 34.40 | 0.22 | 107 | | | | | | | |
| 591 | 6.20 | 34.43 | 0.21 | 97 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **127.50** | CREST; August 17, 1952; 1418 GCT; 26°23'N, 115°08'W; sounding, 1780 fm; wind, 240°, force 1; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 20.17 | 33.48 | 5.00 | 432 | 0 | 20.17 | 33.48 | 5.00 | 23.58 | 432 | 0.00 |
| 10 | 19.07 | 33.48 | 5.32 | 405 | 10 | 19.07 | 33.48 | 5.32 | 23.86 | 405 | 0.04 |
| 20 | 18.63 | 33.51 | 5.23 | 392 | 20 | 18.63 | 33.51 | 5.23 | 24.00 | 392 | 0.08 |
| 35 | 16.28 | 33.26 | 5.57 | 357 | 30 | 17.30 | 33.43 | 5.54 | 24.26 | 367 | 0.12 |
| 50 | 14.06 | 33.24 | 5.28 | 312 | 50 | 14.06 | 33.24 | 5.28 | 24.84 | 312 | 0.19 |
| 65 | 12.42 | 33.15 | 5.25 | 288 | 75 | 12.08 | 33.40 | 4.60 | 25.35 | 263 | 0.26 |
| 80 | 11.92 | 33.44 | 4.43 | 257 | 100 | 10.14 | 33.44 | 4.29 | 25.73 | 227 | 0.32 |
| 99 | 10.14 | 33.44 | 4.43 | 227 | 150 | 10.08 | 34.13 | 2.15 | 26.28 | 175 | 0.42 |
| 123 | 10.80 | 34.05 | 1.97 | 193 | 200 | 9.18 | 34.24 | 1.61 | 26.51 | 153 | 0.51 |
| 151 | 10.02 | 34.13 | 2.15 | 174 | 250 | 8.72 | 34.30 | 1.20 | 26.63 | 141 | 0.58 |
| 198 | 9.22 | 34.23 | 1.63 | 154 | 300 | 8.58 | 34.37 | 0.53 | 26.71 | 134 | 0.65 |
| 244 | 8.75 | 34.29 | 1.30 | 142 | 400 | 7.90 | 34.42 | 0.35 | 26.85 | 121 | 0.79 |
| 291 | 8.60 | 34.36 | 0.57 | 135 | 500 | 6.57 | 34.38 | 0.27 | 27.01 | 106 | 0.91 |
| 393 | 7.96 | 34.42 | 0.36 | 121 | 600 | (5.70) | (34.38) | (0.23) | (27.12) | (95) | (1.02) |
| 489 | 6.70 | 34.38 | 0.28 | 107 | | | | | | | |
| 592 | 5.78 | 34.38 | 0.23 | 96 | | | | | | | |
| **130.30** | CREST; August 18, 1952; 1352 GCT; 26°22'N, 113°31'W; sounding, 40 fm; wind, 290°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 21.26 | 34.02 | 5.29 | 421 | 0 | 21.26 | 34.02 | 5.29 | 23.70 | 421 | 0.00 |
| 7 | 17.78 | 33.95 | 4.37 | 340 | 10 | 16.45 | 33.91 | 4.05 | 24.83 | 313 | 0.04 |
| 17 | 14.71 | 33.86 | 3.31 | 280 | 20 | 13.30 | 33.85 | 2.99 | 25.46 | 253 | 0.07 |
| 27 | 12.58 | 33.86 | 2.26 | 238 | 30 | 12.57 | 33.97 | 2.00 | 25.70 | 230 | 0.09 |
| 37 | 12.66 | 34.14 | 1.36 | 219 | 50 | 12.93 | 34.34 | 0.42 | 25.91 | 210 | 0.13 |
| 47 | 12.90 | 34.33 | 0.44 | 210 | | | | | | | |
| 52 | 12.94 | 34.34 | 0.41 | 210 | | | | | | | |
| 57 | 12.98 | 34.33 | 0.24 | 211 | | | | | | | |
| **130.35** | CREST; August 18, 1952; 1041 GCT; 26°15'N, 113°48'W; sounding, 270 fm; wind, 350°, force 4; weather, clear; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | 21.17 | 33.53 | 5.16 | 454 | 0 | 21.17 | 33.53 | 5.16 | 23.35 | 454 | 0.00 |
| 9 | 18.86 | 33.51 | 5.55 | 398 | 10 | 18.60 | 33.51 | 5.58 | 24.00 | 391 | 0.04 |
| 23 | 16.14 | 33.42 | 5.69 | 342 | 20 | 16.62 | 33.44 | 5.68 | 24.43 | 351 | 0.08 |
| 45 | 13.23 | 33.35 | 5.34 | 288 | 30 | 14.90 | 33.38 | 5.67 | 24.77 | 319 | 0.11 |
| 65 | 12.77 | 34.05 | 1.74 | 228 | 50 | 12.50 | 33.46 | 2.38 | 25.32 | 266 | 0.17 |
| 85 | 12.26 | 34.13 | 1.51 | 213 | 75 | 12.28 | 34.09 | 1.60 | 25.85 | 216 | 0.23 |
| 131 | 12.36 | 34.58 | 0.42 | 181 | 100 | 12.29 | 34.23 | 1.20 | 25.96 | 206 | 0.29 |
| 174 | 11.74 | 34.61 | 0.50 | 168 | 150 | 12.22 | 34.60 | 0.45 | 26.26 | 177 | 0.38 |
| 220 | 11.42 | 34.65 | 0.24 | 159 | 200 | 11.52 | 34.63 | 0.39 | 26.41 | 163 | 0.47 |
| 266 | 10.66 | 34.67 | 0.23 | 145 | 250 | 10.94 | 34.67 | 0.23 | 26.55 | 149 | 0.55 |
| 320 | 10.06 | 34.63 | 0.26 | 138 | 300 | 10.27 | 34.65 | 0.24 | 26.65 | 140 | 0.63 |
| **130.40** | CREST; August 18, 1952; 0709, 0727 GCT; 26°07'N, 114°06'W; sounding, 1200 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 18°, 24°. | | | | | | | | | | |
| 0 | 20.87 | 33.49 | 4.26 | 449 | 0 | 20.87 | 33.49 | 4.26 | 23.40 | 449 | 0.00 |
| 10 | 19.54 | 33.49 | 4.56 | 416 | 10 | 19.54 | 33.49 | 4.56 | 23.75 | 416 | 0.04 |
| 24 | 17.49 | 33.40 | 4.44 | 374 | 20 | 18.15 | 33.41 | 4.45 | 24.04 | 388 | 0.08 |
| 48 | 15.12 | 33.33 | 4.83 | 327 | 30 | 16.90 | 33.38 | 4.48 | 24.32 | 362 | 0.12 |
| 71 | 13.10 | 33.31 | 4.74 | 289 | 50 | 15.00 | 33.33 | 4.82 | 24.71 | 325 | 0.19 |
| | | | | | 75 | 12.80 | 33.32 | 4.68 | 25.15 | 282 | 0.27 |
| 90 | 11.94 | 33.51 | 4.07 | 252 | 100 | 11.81 | 33.68 | 3.60 | 25.62 | 238 | 0.33 |
| 138 | 11.50 | 34.14 | 1.79 | 198 | 150 | 11.37 | 34.25 | 1.49 | 26.14 | 188 | 0.44 |
| 178 | 10.90 | 34.42 | 0.97 | 167 | 200 | 10.70 | 34.47 | 0.79 | 26.44 | 160 | 0.53 |
| 221 | 10.56 | 34.49 | 0.72 | 156 | 250 | 10.00 | 34.45 | 0.73 | 26.54 | 150 | 0.61 |
| 263 | 9.57 | 34.42 | 0.74 | 145 | 300 | 8.91 | 34.38 | 0.70 | 26.67 | 138 | 0.68 |
| 353 | 8.17 | 34.36 | 0.53 | 129 | 400 | 7.79 | 34.41 | 0.35 | 26.86 | 120 | 0.82 |
| 439 | 7.49 | 34.45 | 0.26 | 113 | 500 | 6.75 | 34.41 | 0.30 | 27.01 | 106 | 0.94 |
| 530 | 6.42 | 34.38 | 0.30 | 104 | 600 | 5.91 | 34.40 | 0.30 | 27.11 | 96 | 1.05 |
| 710 | 5.31 | 34.45 | 0.29 | 85 | 700 | 5.36 | 34.45 | 0.29 | 27.22 | 86 | 1.15 |
| 895 | 4.64 | 34.51 | 0.36 | 74 | 800 | 4.94 | 34.49 | 0.30 | 27.30 | 78 | 1.24 |
| 1090 | 3.92 | 34.52 | 0.65 | 65 | 1000 | 4.25 | 34.52 | 0.51 | 27.40 | 69 | 1.40 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m | |
| CREST; August 18, 1952; 0144 GCT;[a] 25°49'N, 114°46'W; sounding, 1800 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 06°. | | | | | | | | | | | | 130.50 |
| 0 | 21.80 | 33.44 | 5.11 | 477 | | | | | | | | |
| 10 | 19.56 | 33.44 | 5.14 | 420 | | | | | | | | |
| 25 | 18.87 | 33.46 | 5.16 | 402 | | | | | | | | |
| 50 | 16.08 | 33.33 | 5.76 | 347 | | | | | | | | |
| 74 | 14.86 | 33.35 | 5.56 | 320 | | | | | | | | |
| 99 | 13.08 | 33.30 | 5.78 | 289 | | | | | | | | |
| 122 | 10.58 | 33.51 | 4.22 | 229 | | | | | | | | |
| 144 | 9.86 | 33.80 | 3.19 | 196 | | | | | | | | |
| 168 | 9.56 | 34.00 | 2.75 | 176 | | | | | | | | |
| 190 | 9.90 | 34.22 | 1.70 | 165 | | | | | | | | |
| 213 | 9.33 | 34.27 | 1.48 | 153 | | | | | | | | |
| 237 | 9.06 | 34.25 | 1.39 | 150 | | | | | | | | |
| 256 | 8.97 | 34.31 | 1.18 | 144 | | | | | | | | |
| 267 | 8.84 | 34.29 | 1.22 | 144 | | | | | | | | |
| 287 | 9.28 | 34.47 | 0.40 | 137 | | | | | | | | |
| CREST; August 18, 1952; 0238 GCT; 25°49'N, 114°46'W; sounding, 1800 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | | | 130.50 |
| 0 | 21.52 | 33.44 | 5.11 | 469 | 0 | 21.52 | 33.44 | 5.11 | 23.19 | 469 | 0.00 | |
| 10 | 19.60 | 33.42 | 5.03 | 422 | 10 | 19.60 | 33.42 | 5.03 | 23.68 | 422 | 0.04 | |
| 20 | 19.11 | 33.44 | 4.84 | 409 | 20 | 19.11 | 33.44 | 4.84 | 23.82 | 409 | 0.09 | |
| 34 | 17.96 | 33.44 | 5.07 | 381 | 30 | 18.30 | 33.44 | 4.97 | 24.03 | 389 | 0.13 | |
| 49 | 15.74 | 33.30 | 5.59 | 342 | 50 | 15.61 | 33.30 | 5.33 | 24.55 | 340 | 0.20 | |
| 63 | 15.11 | 33.30 | 5.59 | 329 | 75 | 14.50 | 33.33 | 5.35 | 24.81 | 314 | 0.28 | |
| 77 | 14.42 | 33.33 | 5.34 | 313 | 100 | 12.80 | 33.30 | 5.25 | 25.14 | 284 | 0.36 | |
| 96 | 13.01 | 33.30 | 5.29 | 288 | 150 | 10.02 | 33.85 | 2.88 | 26.07 | 195 | 0.48 | |
| 119 | 10.72 | 33.44 | 4.20 | 237 | 200 | 9.95 | 34.24 | 1.56 | 26.39 | 165 | 0.57 | |
| 145 | 10.09 | 33.78 | 3.12 | 201 | 250 | 9.18 | 34.31 | 1.20 | 26.57 | 148 | 0.65 | |
| 192 | 9.89 | 34.22 | 1.65 | 165 | 300 | 9.12 | 34.42 | 0.54 | 26.67 | 138 | 0.72 | |
| 234 | 9.17 | 34.27 | 1.35 | 150 | 400 | 7.72 | 34.37 | 0.41 | 26.84 | 122 | 0.86 | |
| 283 | 9.23 | 34.42 | 0.62 | 140 | 500 | 6.75 | 34.37 | 0.32 | 26.98 | 109 | 0.98 | |
| 380 | 7.97 | 34.38 | 0.45 | 124 | | | | | | | | |
| 473 | 6.96 | 34.36 | 0.35 | 112 | | | | | | | | |
| 576 | 6.20 | 34.43 | 0.30 | 97 | | | | | | | | |
| CREST; August 17, 1952; 2050 GCT; 25°28.5'N, 115°24'W; sounding; 1950 fm; wind, 270°, force 1; weather, cloudy; sea, moderate; wire angle, 11°. | | | | | | | | | | | | 130.60 |
| 0 | 23.12 | 33.64 | 4.88 | 498 | 0 | 23.12 | 33.64 | 4.88 | 22.89 | 498 | 0.00 | |
| 10 | 20.76 | 33.49 | 5.10 | 446 | 10 | 20.76 | 33.49 | 5.10 | 23.43 | 446 | 0.05 | |
| 24 | 20.03 | 33.42 | 5.17 | 433 | 20 | 20.21 | 33.42 | 5.15 | 23.52 | 437 | 0.09 | |
| 49 | 17.17 | 33.64 | 5.63 | 349 | 30 | 19.77 | 33.48 | 5.25 | 23.68 | 422 | 0.13 | |
| 73 | 15.83 | 33.55 | 5.73 | 326 | 50 | 17.00 | 33.64 | 5.64 | 24.49 | 345 | 0.21 | |
| 97 | 14.32 | 33.53 | 5.44 | 296 | 75 | 15.80 | 33.55 | 5.73 | 24.70 | 325 | 0.30 | |
| 147 | 10.82 | 33.82 | 3.20 | 210 | 100 | 14.10 | 33.54 | 5.21 | 25.06 | 291 | 0.37 | |
| 194 | 9.84 | 34.07 | 2.37 | 176 | 150 | 10.72 | 33.84 | 3.11 | 25.94 | 207 | 0.50 | |
| 241 | 9.27 | 34.18 | 1.85 | 159 | 200 | 9.73 | 34.09 | 2.29 | 26.31 | 172 | 0.60 | |
| 287 | 8.94 | 34.27 | 1.31 | 147 | 250 | 9.19 | 34.20 | 1.76 | 26.48 | 156 | 0.68 | |
| 385 | 8.02 | 34.40 | 0.52 | 124 | 300 | 8.82 | 34.29 | 1.15 | 26.61 | 144 | 0.76 | |
| 477 | 7.06 | 34.36 | 0.34 | 114 | 400 | 7.87 | 34.40 | 0.48 | 26.84 | 122 | 0.90 | |
| 576 | 6.30 | 34.38 | 0.29 | 102 | 500 | 6.87 | 34.36 | 0.32 | 26.95 | 111 | 1.02 | |
| 766 | 5.17 | 34.42 | 0.32 | 86 | 600 | 6.13 | 34.38 | 0.29 | 27.07 | 100 | 1.13 | |
| 955 | 4.40 | 34.49 | 0.41 | 73 | 700 | 5.53 | 34.40 | 0.30 | 27.16 | 92 | 1.24 | |
| 1156 | 3.75 | 34.52 | 0.63 | 64 | 800 | 5.00 | 34.43 | 0.34 | 27.25 | 83 | 1.33 | |
| | | | | | 1000 | 4.25 | 34.50 | 0.44 | 27.38 | 70 | 1.51 | |
| CREST; August 18, 1952; 1815 GCT; 26°04.5'N, 112°48'W; sounding, 44 fm; wind, 300°, force 3; weather, clear; sea, slight; wire angle, 02°. | | | | | | | | | | | | 133.25 |
| 0 | 23.89 | 34.00 | 4.69 | 493 | 0 | 23.89 | 34.00 | 4.69 | 22.94 | 493 | 0.00 | |
| 10 | 23.04 | 34.00 | 5.17 | 470 | 10 | 23.04 | 34.00 | 5.17 | 23.19 | 470 | 0.05 | |
| 20 | 17.96 | 33.75 | 5.61 | 359 | 20 | 17.96 | 33.75 | 5.61 | 24.35 | 359 | 0.09 | |
| 30 | 13.86 | 33.62 | 4.56 | 280 | 30 | 13.86 | 33.62 | 4.56 | 25.17 | 280 | 0.12 | |
| 50 | 13.38 | 34.18 | 1.50 | 230 | 50 | 13.38 | 34.18 | 1.50 | 25.70 | 230 | 0.17 | |

a) Bathythermograph calibration cast.

SIO

CCOFI 5208

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 133.30 | CREST; August 18, 1952; 2044 GCT; 25°54.5'N, 113°07.5'W; sounding, 98 fm; wind, 280°, force 3; weather, clear; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 23.86 | 33.98 | 4.92 | 494 | 0 | 23.86 | 33.98 | 4.92 | 22.93 | 494 | 0.00 |
| 10 | 22.14 | 33.93 | 4.64 | 450 | 10 | 22.14 | 33.93 | 4.64 | 23.39 | 450 | 0.05 |
| 20 | 16.10 | 33.62 | 5.26 | 327 | 20 | 16.10 | 33.62 | 5.26 | 24.68 | 327 | 0.09 |
| 30 | 13.60 | 33.55 | 4.73 | 280 | 30 | 13.60 | 33.55 | 4.73 | 25.17 | 280 | 0.12 |
| 40 | 12.76 | 33.55 | 4.03 | 265 | 50 | 12.46 | 33.66 | 3.65 | 25.48 | 251 | 0.17 |
| 50 | 12.46 | 33.66 | 3.65 | 251 | 75 | 11.86 | 34.08 | 2.12 | 25.92 | 209 | 0.23 |
| 69 | 11.80 | 33.96 | 2.45 | 217 | 100 | 12.44 | 34.38 | 0.99 | 26.04 | 198 | 0.28 |
| 88 | 12.14 | 34.22 | 1.46 | 204 | | | | | | | |
| 107 | 12.64 | 34.52 | 0.69 | 191 | | | | | | | |
| 116 | 12.86 | 34.61 | 0.35 | 188 | | | | | | | |
| 129 | 12.65 | 34.61 | 0.40 | 185 | | | | | | | |
| 137.23 | CREST; August 19, 1952; 0401 GCT; 25°34'N, 112°18.5'W; sounding, 40 fm; wind, 330°, force 3; weather, clear; sea, slight; wire angle, 08°. | | | | | | | | | | |
| 0 | 25.14 | 33.95 | 4.80 | 533 | 0 | 25.14 | 33.95 | 4.80 | 22.53 | 533 | 0.00 |
| 10 | 24.38 | 33.93 | 4.70 | 512 | 10 | 24.38 | 33.93 | 4.70 | 22.74 | 512 | 0.05 |
| 20 | 18.18 | 33.62 | 5.95 | 374 | 20 | 18.18 | 33.62 | 5.95 | 24.19 | 374 | 0.10 |
| 30 | 16.06 | 33.51 | 5.77 | 334 | 30 | 16.06 | 33.51 | 5.77 | 24.61 | 334 | 0.13 |
| 50 | 13.54 | 33.73 | 3.64 | 266 | 50 | 13.54 | 33.73 | 3.64 | 25.32 | 266 | 0.19 |
| 137.30 | CREST; August 19, 1952; 0102 GCT; 25°20'N, 112°45.5'W; sounding, 980 fm; wind, 280°, force 4; weather, clear; sea, moderate; wire angle, 29°. | | | | | | | | | | |
| 0a) | 23.66 | 33.77 | 4.48 | 503 | 0 | 23.66 | 33.77 | 4.48 | 22.83 | 503 | 0.00 |
| 8 | 23.24 | 33.77 | 4.66 | 492 | 10 | 22.85 | 33.75 | 4.70 | 23.05 | 483 | 0.05 |
| 17 | 20.52 | 33.60 | 4.92 | 432 | 20 | 19.72 | 33.55 | 5.02 | 23.75 | 416 | 0.09 |
| 31 | 16.68 | 33.49 | 5.89 | 349 | 30 | 16.80 | 33.49 | 5.60 | 24.42 | 352 | 0.13 |
| 47 | 14.78 | 33.49 | 6.41 | 308 | 50 | 14.49 | 33.50 | 6.41 | 24.95 | 302 | 0.20 |
| 60 | 13.50 | 33.68 | 4.87 | 269 | 75 | 12.30 | 33.77 | 3.50 | 25.60 | 240 | 0.27 |
| 71 | 12.58 | 33.49 | 3.74 | 266 | 100 | 11.99 | 34.03 | 1.75 | 25.86 | 215 | 0.32 |
| 91 | 11.81 | 33.91 | 2.57 | 221 | 150 | 12.47 | 34.57 | 0.30 | 26.18 | 184 | 0.43 |
| 109 | 12.55 | 34.43 | 1.00 | 196 | 200 | 11.89 | 34.63 | 0.17 | 26.34 | 169 | 0.52 |
| 130 | 12.65 | 34.49 | 0.69 | 193 | 250 | 11.11 | 34.63 | 0.14 | 26.49 | 155 | 0.60 |
| 166 | 12.22 | 34.61 | 0.17 | 177 | 300 | (10.90) | (34.61) | (0.15) | (26.51) | (153) | (0.68) |
| 206 | 11.82 | 34.63 | 0.17 | 168 | | | | | | | |
| 237 | 11.26 | 34.63 | 0.16 | 158 | | | | | | | |
| 299 | 10.90 | 34.61 | 0.17 | 153 | | | | | | | |
| $120^{5}.39^{5}$ K1 | E. W. SCRIPPS; August 9, 1952; 2109 GCT; 27°51'N, 115°07'W; sounding, 22 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 08°.[b] | | | | | | | | | | |
| 0 | 16.0 | 33.62 | | 325 | 0 | 16.0 | 33.62 | | 24.71 | 325 | 0.00 |
| 6 | 15.44 | 33.69 | | 308 | 10 | 15.24 | 33.72 | | 24.95 | 301 | 0.03 |
| 13 | 15.14 | 33.73 | | 298 | 20 | 14.80 | 33.73 | | 25.06 | 291 | 0.06 |
| 20 | - | 33.73 | | | 30 | 14.46 | 33.75 | | 25.14 | 283 | 0.09 |
| 28 | 14.54 | 33.74 | | 285 | | | | | | | |
| 35 | 14.36 | 33.77 | | 279 | | | | | | | |
| $120^{5}.39^{5}$ K2 | E. W. SCRIPPS; August 10, 1952; 0312 GCT; 27°51'N, 115°07'W; sounding, 22 fm; wind, 280°, force 2; weather, partly cloudy; sea, slight; wire angle, 02°. | | | | | | | | | | |
| 0 | 16.1 | 33.58 | | 330 | 0 | 16.1 | 33.58 | | 24.65 | 330 | 0.00 |
| 6 | 15.84 | 33.58 | | 324 | 10 | 15.54 | 33.60 | | 24.79 | 316 | 0.03 |
| 13 | 15.19 | 33.64 | | 306 | 20 | 14.18 | 33.68 | | 25.15 | 282 | 0.06 |
| 20 | 14.18 | 33.68 | | 282 | 30 | 13.98 | 33.69 | | 25.20 | 278 | 0.09 |
| 28 | 14.01 | 33.69 | | 278 | | | | | | | |
| 35 | 13.86 | 33.69 | | 275 | | | | | | | |

a) Because of an error in reading the fathometer, the last two bottles of this cast rested on the bottom and were rejected.

b) This is the first station to be occupied during a special current study in Sebastián Vizcaino Bay. These stations of RV E. W. Scripps and RV Spencer F. Baird are presented separately and out of numerical order from the other stations of CCOFI Cruise 5208; the stations of E. W. Scripps are listed in chronological order rather than in numerical order.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| E. W. SCRIPPS; August 10, 1952; 0900 GCT; 27°51'N, 115°07'W; sounding, 22 fm; wind, 290°, force 3; weather, partly cloudy; sea, moderate; wire angle, 04°. | | | | | | | | | | | $120^5.39^5$ K3 |
| 0 | 17.1 | 33.58 | | 352 | 0 | 17.1 | 33.58 | | 24.42 | 352 | 0.00 |
| 7 | 15.45 | 33.64 | | 311 | 10 | 14.88 | 33.67 | | 24.99 | 297 | 0.03 |
| 15 | 14.38 | 33.68 | | 286 | 20 | 14.32 | 33.69 | | 25.13 | 284 | 0.06 |
| 22 | 14.34 | 33.64u | | | 30 | 14.30 | 33.71 | | 25.15 | 283 | 0.09 |
| 29 | 14.31 | 33.71 | | 283 | | | | | | | |
| 36 | 14.08 | 33.71 | | 278 | | | | | | | |
| E. W. SCRIPPS; August 10, 1952; 1532 GCT; 27°51'N, 115°07'W; sounding, 22 fm; wind, 300°, force 2; weather, partly cloudy; sea, slight; wire angle, 04°. | | | | | | | | | | | $120^5.39^5$ K4 |
| 0 | 16.6 | 33.60 | | 339 | 0 | 16.6 | 33.60 | | 24.55 | 339 | 0.00 |
| 7 | 15.37 | 33.68 | | 307 | 10 | 14.66 | 33.70 | | 25.06 | 291 | 0.03 |
| 13 | 14.37 | 33.71 | | 284 | 20 | 14.25 | 33.69 | | 25.14 | 283 | 0.06 |
| 21 | 14.25 | 33.69 | | 283 | 30 | 14.02 | 33.69 | | 25.19 | 278 | 0.09 |
| 28 | 14.07 | 33.69 | | 279 | | | | | | | |
| 35 | 13.90 | 33.68 | | 277 | | | | | | | |
| E. W. SCRIPPS; August 10, 1952; 2100 GCT; 27°51'N, 115°07'W; sounding, 22 fm; wind, 030°, force 1; weather, partly cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | | $120^5.39^5$ K5 |
| 0 | 16.6 | 33.64 | | 336 | 0 | 16.6 | 33.64 | | 24.58 | 336 | 0.00 |
| 7 | 14.19 | 33.64 | | 286 | 10 | 14.14 | 33.65 | | 25.14 | 284 | 0.03 |
| 15 | 14.08 | 33.68 | | 280 | 20 | 14.05 | 33.68 | | 25.18 | 280 | 0.06 |
| 22 | 14.03 | 33.68 | | 279 | 30 | 13.95 | 33.69 | | 25.21 | 277 | 0.09 |
| 29 | 13.98 | 33.69 | | 278 | | | | | | | |
| 35 | 13.56 | 33.69 | | 269 | | | | | | | |
| E. W. SCRIPPS; August 11, 1952; 0018 GCT; 27°59'N, 115°12'W; sounding, 15 fm; wind, 320°, force 4; weather, partly cloudy; sea, slight; wire angle, 07°. | | | | | | | | | | | $119^5.39^5$ K1 |
| 0 | 20.2 | 33.57 | | 426 | 0 | 20.2 | 33.57 | | 23.64 | 426 | 0.00 |
| 4 | 16.15 | 33.53 | | 334 | 10 | 13.32 | 33.56 | | 25.23 | 274 | 0.04 |
| 8 | 13.51 | 33.53 | | 280 | 20 | 12.41 | 33.54 | | 25.40 | 259 | 0.06 |
| 12 | 13.13 | 33.58 | | 269 | | | | | | | |
| 17 | 12.54 | 33.53 | | 262 | | | | | | | |
| 22 | 12.39 | 33.55 | | 258 | | | | | | | |
| E. W. SCRIPPS; August 11, 1952; 0610 GCT; 27°59'N, 115°12'W; sounding, 15 fm; wind, 320°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | $119^5.39^5$ K2 |
| 0 | 18.8 | 33.62 | | 388 | 0 | 18.8 | 33.62 | | 24.04 | 388 | 0.00 |
| 4 | 18.17 | 33.62 | | 373 | 10 | 17.40 | 33.57 | | 24.34 | 359 | 0.04 |
| 8 | 17.58 | 33.58 | | 363 | 20 | 15.50 | 33.55 | | 24.77 | 319 | 0.07 |
| 12 | 17.23 | 33.57 | | 355 | | | | | | | |
| 17 | - | 33.57 | | | | | | | | | |
| 22 | 13.86 | 33.53 | | 287 | | | | | | | |
| E. W. SCRIPPS; August 11, 1952; 1248 GCT; 27°59'N, 115°12'W; sounding, 15 fm; wind, calm; weather, overcast; sea, slight; wire angle, 02°. | | | | | | | | | | | $119^5.39^5$ K3 |
| 0 | 19.9 | 33.75 | | 406 | 0 | 19.9 | 33.75 | | 23.86 | 406 | 0.00 |
| 4 | 19.81u | 33.67 | | | 10 | 14.55 | 33.61 | | 25.02 | 295 | 0.04 |
| 8 | 15.59 | 33.62 | | 316 | 20 | 13.65 | 33.55 | | 25.16 | 281 | 0.06 |
| 12 | 14.15 | 33.60 | | 288 | | | | | | | |
| 17 | 13.73 | 33.57 | | 282 | | | | | | | |
| 22 | 13.60 | 33.54 | | 281 | | | | | | | |
| E. W. SCRIPPS; August 11, 1952; 1812 GCT; 27°59'N, 115°12'W; sounding, 15 fm; wind, 280°, force 4; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | $119^5.39^5$ K4 |
| 0 | 19.3 | 33.68 | | 396 | 0 | 19.3 | 33.68 | | 23.96 | 396 | 0.00 |
| 4 | 17.78 | 33.62 | | 364 | 10 | 16.11 | 33.60 | | 24.67 | 328 | 0.04 |
| 8 | 16.53 | 33.62 | | 336 | 20 | 14.38 | 33.60 | | 25.05 | 292 | 0.07 |
| 12 | 15.67 | 33.58 | | 320 | | | | | | | |
| 17 | 14.75 | 33.64 | | 297 | | | | | | | |
| 22 | 14.16 | 33.53 | | 293 | | | | | | | |

SIO
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5208

| | OBSERVED | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 1195.395 K5 | E. W. SCRIPPS; August 12, 1952; 0013 GCT; 27°59'N, 115°12'W; sounding, 15 fm; wind, 300°, force 2; weather, partly cloudy; sea, slight; wire angle, 07°. | | | | | | | | | | |
| 0 | 19.8 | 33.78 | | 401 | 0 | 19.8 | 33.78 | | 23.90 | 401 | 0.00 |
| 4 | 19.85 | 33.78 | | 402 | 10 | 17.0 | 33.67 | | 24.51 | 343 | 0.04 |
| 8 | 18.41 | 33.73 | | 371 | 20 | 14.56 | 33.57 | | 24.99 | 298 | 0.07 |
| 12 | - | 33.62 | | | | | | | | | |
| 17 | - | 33.57 | | | | | | | | | |
| 22 | 14.38 | 33.57 | | 294 | | | | | | | |
| 118.32 K1 | E. W. SCRIPPS; August 12, 1952; 1440 GCT; 28°27'N, 115°02'W; sounding, 76 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 07°. | | | | | | | | | | |
| 0 | 18.7 | 33.57 | | 390 | 0 | 18.7 | 33.57 | | 24.03 | 390 | 0.00 |
| 20 | 17.08 | 33.55 | | 353 | 10 | 18.7 | 33.56 | | 24.02 | 390 | 0.04 |
| 35 | - | 33.52 | | | 20 | 17.08 | 33.55 | | 24.40 | 353 | 0.08 |
| 72 | 10.66 | 33.78 | | 210 | 30 | 15.76 | 33.53 | | 24.69 | 326 | 0.11 |
| 89 | 10.73 | 33.89 | | 203 | 50 | 12.46 | 33.62 | | 25.45 | 254 | 0.17 |
| 119 | 10.80 | 34.14 | | 186 | 75 | 10.67 | 33.80 | | 25.92 | 209 | 0.23 |
| | | | | | 100 | 10.75 | 33.97 | | 26.04 | 198 | 0.28 |
| 118.32 K2 | E. W. SCRIPPS; August 12, 1952; 2102, 2117 GCT; 28°27'N, 115°02'W; sounding, 75 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 04°, 04°. | | | | | | | | | | |
| 0 | 18.8 | 33.62 | | 388 | 0 | 18.8 | 33.62 | | 24.04 | 388 | 0.00 |
| 11 | 17.94 | 33.58 | | 371 | 10 | 18.80 | 33.58 | | 24.01 | 391 | 0.04 |
| 28 | - | 33.51 | | | 20 | 16.80 | 33.54 | | 24.46 | 348 | 0.08 |
| 45 | 12.03 | 33.58 | | 249 | 30 | 16.10 | 33.51 | | 24.60 | 335 | 0.11 |
| 80 | 10.86 | 33.98 | | 199 | 50 | 11.46 | 33.62 | | 25.64 | 236 | 0.17 |
| | | | | | 75 | 10.88 | 33.95 | | 26.00 | 202 | 0.22 |
| 130 | 10.78 | 34.11 | | 188 | 100 | 10.82 | 34.05 | | 26.09 | 193 | 0.27 |
| 118.32 K3 | E. W. SCRIPPS; August 13, 1952; 0210 GCT; 28°27'N, 115°02'W; sounding, 75 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 18.0 | 33.55 | | 374 | 0 | 18.0 | 33.55 | | 24.18 | 374 | 0.00 |
| 11 | 17.87 | 33.55 | | 371 | 10 | 17.90 | 33.55 | | 24.21 | 372 | 0.04 |
| 37 | 13.61 | 33.55 | | 281 | 20 | 16.56 | 33.55 | | 24.53 | 342 | 0.07 |
| 44 | 12.05 | 33.55 | | 252 | 30 | 14.97 | 33.55 | | 24.88 | 308 | 0.11 |
| 79 | 10.66 | 33.96 | | 197 | 50 | 11.52 | 33.58 | | 25.60 | 240 | 0.16 |
| 128 | 10.78 | 34.22 | | 180 | 75 | 10.70 | 33.92 | | 26.01 | 201 | 0.22 |
| | | | | | 100 | 11.10 | 34.10 | | 26.08 | 194 | 0.27 |
| 118.31 K1 | E. W. SCRIPPS; August 13, 1952; 0505 GCT; 28°31.5'N, 114°52'W; sounding, 67 fm; wind, 280°, force 4; weather, partly cloudy; sea, slight; wire angle, 10°. | | | | | | | | | | |
| 0 | 18.4 | 33.53 | | 385 | 0 | 18.4 | 33.53 | | 24.07 | 385 | 0.00 |
| 15 | 18.18 | 33.51 | | 382 | 10 | 18.25 | 33.51 | | 24.09 | 383 | 0.04 |
| 30 | 16.83 | 33.55 | | 348 | 20 | 18.02 | 33.52 | | 24.16 | 377 | 0.08 |
| 49 | 12.31 | 33.51 | | 259 | 30 | 16.83 | 33.55 | | 24.46 | 348 | 0.11 |
| 74 | 10.62 | 33.75 | | 212 | 50 | 12.22 | 33.51 | | 25.41 | 258 | 0.17 |
| 108 | 10.54 | 34.13 | | 183 | 75 | 10.61 | 33.77 | | 25.91 | 210 | 0.23 |
| | | | | | 100 | 10.55 | 34.05 | | 26.14 | 189 | 0.28 |
| 118.31 K2 | E. W. SCRIPPS; August 13, 1952; 1100 GCT; 28°31.5'N, 114°52'W; sounding, 67 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 09°. | | | | | | | | | | |
| 0 | 18.5 | | | | 0 | 18.5 | | | | | |
| 15 | 17.87 | | | | 10 | 18.50 | | | | | |
| 30 | 16.33 | | | | 20 | 17.08 | | | | | |
| 49 | 12.40 | | | | 30 | 16.33 | | | | | |
| 74 | 10.69 | | | | 50 | 12.33 | | | | | |
| 109 | 10.54 | | | | 75 | 10.68 | | | | | |
| | | | | | 100 | 10.53 | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| E. W. SCRIPPS; August 13, 1952; 1704, 1715 GCT; 28°31.5'N, 114°52'W; sounding, 67 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 11°, 08°. | | | | | | | | | | | 118.31 K3 |
| 0 | 18.7 | 33.60 | | 387 | 0 | 18.7 | 33.60 | | 24.05 | 387 | 0.00 |
| 15 | 17.07 | 33.51 | | 356 | 10 | 17.67 | 33.53 | | 24.25 | 368 | 0.04 |
| | | | | | 20 | 16.78 | 33.51 | | 24.44 | 350 | 0.07 |
| 30 | 16.41 | 33.51 | | 341 | 30 | 16.41 | 33.51 | | 24.53 | 341 | 0.11 |
| 50 | 12.85 | 33.51 | | 269 | 50 | 12.85 | 33.51 | | 25.29 | 269 | 0.17 |
| 74 | 10.33 | 33.78 | | 205 | 75 | 10.34 | 33.79 | | 25.97 | 204 | 0.23 |
| 109 | 10.55 | 34.14 | | 182 | 100 | 10.47 | 34.07 | | 26.17 | 186 | 0.28 |
| E. W. SCRIPPS; August 13, 1952; 1930, 1942 GCT; 28°35.5'N, 114°41.5'W; sounding, 55 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 04°, missing. | | | | | | | | | | | 118.29 K1 |
| 0 | 16.0 | 33.44 | | 338 | 0 | 16.0 | 33.44 | | 24.57 | 338 | 0.00 |
| 10 | 15.77 | 33.44 | | 333 | 10 | 15.77 | 33.44 | | 24.62 | 333 | 0.03 |
| 20 | 15.34 | 33.42 | | 325 | 20 | 15.34 | 33.42 | | 24.70 | 325 | 0.07 |
| 40 | 12.31 | 33.35 | | 271 | 30 | 14.03 | 33.39 | | 24.96 | 301 | 0.10 |
| | | | | | 50 | 11.70 | 33.43 | | 25.45 | 254 | 0.15 |
| 65 | 11.01 | 33.69 | | 223 | 75 | 10.66 | 33.85 | | 25.96 | 205 | 0.21 |
| 100 | 10.48 | 34.20 | | 176 | 100 | 10.48 | 34.20 | | 26.26 | 176 | 0.26 |
| E. W. SCRIPPS; August 14, 1952; 0235, 0313 GCT; 28°35.5'N, 114°41.5'W; sounding, 55 fm; wind, 280°, force 3; weather, overcast; sea, moderate; wire angle, 03°, 02°. | | | | | | | | | | | 118.29 K2 |
| 0 | 16.86 | 33.48 | | 354 | 0 | 16.86 | 33.48 | | 24.40 | 354 | 0.00 |
| 10 | - | 33.37 | | | 10 | 16.2 | 33.37 | | 24.47 | 347 | 0.04 |
| | | | | | 20 | 16.0 | 33.39 | | 24.53 | 341 | 0.07 |
| 25 | - | 33.42 | | | 30 | 12.5 | 33.39 | | 25.26 | 271 | 0.10 |
| 45 | 11.88 | 33.33 | | 265 | 50 | 11.97 | 33.37 | | 25.35 | 263 | 0.15 |
| 70 | 10.75 | 33.71 | | 217 | 75 | 10.54 | 33.79 | | 25.94 | 208 | 0.21 |
| 90 | 10.07 | 34.00 | | 184 | | | | | | | |
| E. W. SCRIPPS; August 14, 1952; 0730, 0742 GCT; 28°35.5'N, 114°41.5'W; sounding, 55 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 03°, 03°. | | | | | | | | | | | 118.29 K3 |
| 0 | 17.7 | 33.62 | | 362 | 0 | 17.7 | 33.62 | | 24.31 | 362 | 0.00 |
| 10 | 17.34 | 33.62 | | 354 | 10 | 17.34 | 33.62 | | 24.40 | 354 | 0.04 |
| 25 | 16.15 | 33.60 | | 329 | 20 | 16.63 | 33.61 | | 24.56 | 339 | 0.07 |
| 45 | 11.47 | 33.44 | | 249 | 30 | 14.93 | 33.56 | | 24.90 | 306 | 0.10 |
| 70 | 10.35 | 33.84 | | 201 | 50 | 11.59 | 33.48 | | 25.51 | 249 | 0.16 |
| | | | | | 75 | 10.36 | 33.93 | | 26.08 | 194 | 0.21 |
| 90 | 10.50 | 34.18 | | 178 | | | | | | | |
| E. W. SCRIPPS; August 14, 1952; 0930 GCT; 28°35.5'N, 114°28'W; sounding, 52 fm; wind, 300°, force 2; weather, overcast; sea, slight; wire angle, 02°. | | | | | | | | | | | 119.26 K1 |
| 0 | 16.4 | 33.57 | | 337 | 0 | 16.4 | 33.57 | | 24.58 | 337 | 0.00 |
| 10 | 16.35 | 33.55 | | 337 | 10 | 16.35 | 33.55 | | 24.57 | 337 | 0.03 |
| 20 | 12.77 | 33.39 | | 276 | 20 | 12.77 | 33.39 | | 25.21 | 276 | 0.06 |
| 40 | 10.80 | 33.71 | | 218 | 30 | 11.48 | 33.54 | | 25.57 | 242 | 0.09 |
| 60 | 10.16 | 33.87 | | 196 | 50 | 10.38 | 33.80 | | 25.97 | 204 | 0.14 |
| 80 | 10.27 | 34.14 | | 177 | 75 | 10.22 | 34.08 | | 26.22 | 181 | 0.18 |
| E. W. SCRIPPS; August 14, 1952; 1538 GCT; 28°35.5'N, 114°28'W; sounding, 55 fm; wind, 290°, force 1; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 119.26 K2 |
| 0 | 16.8 | 33.57 | | 346 | 0 | 16.8 | 33.57 | | 24.48 | 346 | 0.00 |
| 10 | 16.06 | 33.55 | | 331 | 10 | 16.06 | 33.55 | | 24.64 | 331 | 0.03 |
| 20 | 12.79 | 33.29 | | 284 | 20 | 12.79 | 33.29 | | 25.13 | 284 | 0.06 |
| 40 | 10.96 | 33.68 | | 223 | 30 | 11.52 | 33.52 | | 25.55 | 244 | 0.09 |
| 60 | 10.20 | 33.86 | | 197 | 50 | 10.51 | 33.77 | | 25.93 | 209 | 0.14 |
| 80 | 10.02 | 34.07 | | 179 | 75 | 10.05 | 34.02 | | 26.20 | 183 | 0.19 |

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5208

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

119.26
K3

E. W. SCRIPPS; August 14, 1952; 2126, 2140 GCT; 28°35.5'N, 114°28'W; sounding, 55 fm; wind, 290°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.0 | 33.58 | | 349 | 0 | 17.0 | 33.58 | | 24.45 | 349 | 0.00 |
| 10 | 15.82 | 33.55 | | 326 | 10 | 15.82 | 33.55 | | 24.69 | 326 | 0.03 |
| 20 | 13.23 | 33.32 | | 290 | 20 | 13.23 | 33.32 | | 25.07 | 290 | 0.06 |
| 40 | 11.27 | 33.67 | | 229 | 30 | 12.16 | 33.50 | | 25.42 | 257 | 0.09 |
| | | | | | 50 | 10.68 | 33.78 | | 25.90 | 211 | 0.14 |
| 60 | 10.24 | 33.89 | | 195 | 75 | 10.25 | 34.08 | | 26.21 | 181 | 0.19 |
| 80 | 10.23 | 34.14 | | 177 | | | | | | | |

113.30

SPENCER F. BAIRD; August 12, 1952; 1411 GCT; 29°22.5'N, 115°17.5'W; sounding, 38 fm; wind, 300°, force 3; weather, partly cloudy; sea, slight; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.17 | 33.64 | 4.67 | 247 | 0 | 12.17 | 33.64 | 4.67 | 25.52 | 247 | 0.00 |
| 10 | 12.26 | 33.64 | 4.78 | 249 | 10 | 12.26 | 33.64 | 4.78 | 25.50 | 249 | 0.02 |
| 20 | 12.12 | 33.64 | 4.64 | 246 | 20 | 12.12 | 33.64 | 4.64 | 25.53 | 246 | 0.05 |
| 30 | 12.13 | 33.68 | 4.51 | 243 | 30 | 12.13 | 33.68 | 4.51 | 25.56 | 243 | 0.07 |
| 50 | 10.62 | 33.73 | 2.40 | 213 | 50 | 10.62 | 33.73 | 2.40 | 25.87 | 213 | 0.12 |

113.35

SPENCER F. BAIRD; August 12, 1952; 1707 GCT; 29°12'N, 115°39'W; sounding, 790 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.5 | 33.39 | 5.89 | 398 | 0 | 18.5 | 33.39 | 5.89 | 23.94 | 398 | 0.00 |
| 10 | 18.36 | 33.40 | 5.48 | 394 | 10 | 18.36 | 33.40 | 5.48 | 23.98 | 394 | 0.04 |
| 25 | 17.82 | 33.37 | 5.81 | 383 | 20 | 18.07 | 33.38 | 5.65 | 24.04 | 388 | 0.08 |
| 54 | 12.96 | 33.08 | 6.35 | 303 | 30 | 15.50 | 33.34 | 5.99 | 24.60 | 334 | 0.11 |
| 78 | 10.47 | 33.21 | 5.11 | 249 | 50 | 13.27 | 33.09 | 6.35 | 24.88 | 308 | 0.18 |
| 108 | 9.88 | 33.46 | 4.27 | 221 | 75 | 11.45 | 33.19 | 5.25 | 25.31 | 267 | 0.25 |
| | | | | | 100 | 10.12 | 33.41 | 4.42 | 25.71 | 229 | 0.31 |

115.26

SPENCER F. BAIRD; August 13, 1952; 0220 GCT; 29°11'N, 114°56'W; sounding, 39 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.4 | 33.56 | 6.58 | 316 | 0 | 15.4 | 33.56 | 6.58 | 24.80 | 316 | 0.00 |
| 10 | 15.16 | 33.57 | 6.93 | 310 | 10 | 15.16 | 33.57 | 6.93 | 24.86 | 310 | 0.03 |
| 20 | 11.76 | 33.51 | 4.76 | 249 | 20 | 11.76 | 33.51 | 4.76 | 25.50 | 249 | 0.06 |
| 30 | 11.54 | 33.62 | 4.02 | 237 | 30 | 11.54 | 33.62 | 4.02 | 25.62 | 237 | 0.08 |
| 40 | 10.76 | 33.69 | 2.72 | 219 | 50 | 10.42 | 33.71 | 2.74 | 25.89 | 212 | 0.13 |
| 50 | 10.42 | 33.71 | 2.74 | 212 | | | | | | | |

115.30

SPENCER F. BAIRD; August 12, 1952; 2310 GCT; 29°05'N, 115°07.5'W; sounding, 80 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.2 | 33.51 | 5.95 | 276 | 0 | 13.2 | 33.51 | 5.95 | 25.22 | 276 | 0.00 |
| 10 | 13.02 | 33.46 | 6.03 | 276 | 10 | 13.02 | 33.46 | 6.03 | 25.22 | 276 | 0.03 |
| 25 | 12.80 | 33.55 | 5.12 | 265 | 20 | 12.88 | 33.51 | 5.60 | 25.28 | 270 | 0.05 |
| 49 | 10.91 | 33.73 | 3.16 | 218 | 30 | 12.68 | 33.60 | 4.48 | 25.39 | 259 | 0.08 |
| 73 | 10.28 | 33.78 | 2.91 | 204 | 50 | 10.85 | 33.73 | 3.15 | 25.83 | 217 | 0.13 |
| 98 | 11.08 | 34.23 | 0.94 | 184 | 75 | 10.32 | 33.79 | 2.89 | 25.97 | 204 | 0.18 |
| | | | | | 100 | (11.05) | (34.24) | (0.93) | (26.19) | (183) | (0.23) |

115.35

SPENCER F. BAIRD; August 12, 1952; 2013 GCT; 28°55'N, 115°27.5'W; sounding, 600 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.7 | 33.35 | 5.61 | 382 | 0 | 17.7 | 33.35 | 5.61 | 24.10 | 382 | 0.00 |
| 10 | 17.59 | 33.39 | 5.31 | 377 | 10 | 17.59 | 33.39 | 5.31 | 24.16 | 377 | 0.04 |
| 25 | 17.54 | 33.33 | 5.53 | 380 | 20 | 17.55 | 33.36 | 5.41 | 24.15 | 378 | 0.08 |
| 54 | 13.90 | 33.24 | 6.15 | 309 | 30 | 15.50 | 33.31 | 5.70 | 24.58 | 337 | 0.11 |
| 79 | 11.70 | 33.17 | 5.50 | 273 | 50 | 14.30 | 33.25 | 6.15 | 24.79 | 316 | 0.18 |
| 108 | 10.42 | 33.42 | 4.48 | 233 | 75 | 12.00 | 33.17 | 5.65 | 25.19 | 279 | 0.25 |
| | | | | | 100 | 10.55 | 33.34 | 4.72 | 25.58 | 241 | 0.32 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

SPENCER F. BAIRD; August 13, 1952; 0724 GCT; 28°48'N, 114°57'W; sounding, 54 fm; wind, 290°, force 3; weather, overcast; sea, moderate; wire angle, 07°. 117.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.4 | | | | 0 | 15.4 | | | | | |
| 10 | 15.46 | | | | 10 | 15.46 | | | | | |
| 20 | 12.16 | | | | 20 | 12.16 | | | | | |
| 30 | 11.15 | | | | 30 | 11.15 | | | | | |
| 50 | 10.84 | | | | 50 | 10.84 | | | | | |
| 74 | 10.08 | | | | 75 | (10.06) | | | | | |

SPENCER F. BAIRD; August 13, 1952; 1018 GCT; 28°36.5'N, 115°15.5'W; sounding, 87 fm; wind, 290°, force 4; weather, overcast; sea, moderate; wire angle, 20°. 117.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.3 | 33.31 | 6.45 | 312 | 0 | 14.3 | 33.31 | 6.45 | 24.84 | 312 | 0.00 |
| 9 | 14.29 | 33.30 | 6.48 | 312 | 10 | 14.29 | 33.30 | 6.48 | 24.83 | 312 | 0.03 |
| 24 | 14.06 | 33.33 | 6.38 | 306 | 20 | 14.15 | 33.32 | 6.41 | 24.88 | 308 | 0.06 |
| 47 | 12.14 | 33.35 | 5.51 | 268 | 30 | 13.70 | 33.34 | 6.23 | 24.99 | 298 | 0.09 |
| 70 | 11.01 | 33.48 | 4.54 | 238 | 50 | 11.91 | 33.36 | 5.41 | 25.35 | 263 | 0.15 |
| 94 | 11.24 | 34.05 | 1.90 | 200 | 75 | 11.03 | 33.54 | 4.25 | 25.65 | 234 | 0.21 |

SPENCER F. BAIRD; August 14, 1952; 1622 GCT; 28°28'N, 115°35'W; sounding, 440 fm; wind, 290°, force 2; weather, cloudy; sea, moderate; wire angle, 24°. 117.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.0 | 33.39 | 5.89 | 363 | 0 | 17.0 | 33.39 | 5.89 | 24.30 | 363 | 0.00 |
| 9 | 16.42 | 33.39 | 6.05 | 350 | 10 | 16.36 | 33.39 | 6.06 | 24.45 | 349 | 0.04 |
| 46 | 12.74 | 33.24 | 6.17 | 287 | 20 | 15.20 | 33.36 | 6.15 | 24.69 | 327 | 0.07 |
| 89 | 11.16 | 33.64 | 4.06 | 229 | 30 | 14.90 | 33.31 | 6.19 | 24.71 | 324 | 0.10 |
| 130 | 10.88 | 34.04 | 1.84 | 195 | 50 | 12.34 | 33.25 | 6.14 | 25.19 | 279 | 0.16 |
| 175 | 11.46 | 34.49 | 0.50 | 172 | 75 | 11.85 | 33.49 | 4.95 | 25.47 | 252 | 0.23 |
| | | | | | 100 | 10.97 | 33.75 | 3.40 | 25.83 | 218 | 0.29 |
| | | | | | 150 | 11.44 | 34.27 | 1.10 | 26.15 | 188 | 0.39 |

SPENCER F. BAIRD; August 17, 1952; 1628 GCT; 28°27'N, 115°00.5'W; sounding, 69 fm; wind, 360°, force 2; weather, clear; sea, slight; wire angle, 03°. 118.33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.3 | 33.53 | 7.25 | 338 | 0 | 16.3 | 33.53 | 7.25 | 24.57 | 338 | 0.00 |
| 10 | 15.44 | 33.53 | 7.25 | 319 | 10 | 15.44 | 33.53 | 7.25 | 24.76 | 319 | 0.03 |
| 26 | 12.56 | 33.30 | 6.15 | 279 | 20 | 13.10 | 33.38 | 6.53 | 25.14 | 283 | 0.06 |
| 61 | 11.58 | 33.37 | 4.94 | 256 | 30 | 12.45 | 33.30 | 5.99 | 25.20 | 277 | 0.09 |
| 86 | 10.88 | 33.66 | 3.57 | 223 | 50 | 11.90 | 33.33 | 5.30 | 25.33 | 265 | 0.15 |
| 111 | 10.44 | 33.86 | 2.36 | 201 | 75 | 11.16 | 33.53 | 4.22 | 25.62 | 237 | 0.21 |
| | | | | | 100 | 10.59 | 33.79 | 2.80 | 25.93 | 209 | 0.26 |

SPENCER F. BAIRD; August 14, 1952; 1300 GCT; 28°24.5'N, 115°08'W; sounding, 75 fm; wind, 280°, force 2; weather, cloudy; sea, moderate; wire angle, 09°. 118.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.2 | 33.33 | 6.66 | 329 | 0 | 15.2 | 33.33 | 6.66 | 24.66 | 329 | 0.00 |
| 10 | 15.30 | 33.35 | 6.68 | 329 | 10 | 15.30 | 33.35 | 6.68 | 24.66 | 329 | 0.03 |
| 25 | 14.76 | 33.31 | 6.55 | 321 | 20 | 15.03 | 33.32 | 6.60 | 24.69 | 326 | 0.07 |
| 49 | 12.05 | 33.46 | 5.21 | 258 | 30 | 13.90 | 33.33 | 6.43 | 24.94 | 302 | 0.10 |
| 74 | 11.50 | 33.62 | 4.39 | 237 | 50 | 12.05 | 33.47 | 5.20 | 25.41 | 257 | 0.15 |
| 99 | 10.50 | 33.80 | 2.86 | 206 | 75 | 11.47 | 33.63 | 4.36 | 25.64 | 235 | 0.22 |
| | | | | | 100 | (10.46) | (33.81) | (2.85) | (25.96) | (205) | (0.27) |

SPENCER F. BAIRD; August 13, 1952; 2230 GCT; 28°41'N, 114°26.5'W; sounding, 45 fm; wind, 290°, force 4; weather, partly cloudy; sea, moderate; wire angle, 08°. 118$^5$.25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.6 | 33.53 | 6.38 | 344 | 0 | 16.6 | 33.53 | 6.38 | 24.50 | 344 | 0.00 |
| 10 | 16.48 | 33.53 | 6.47 | 342 | 10 | 16.48 | 33.53 | 6.47 | 24.53 | 342 | 0.03 |
| 20 | 12.00 | 33.62 | 4.18 | 245 | 20 | 12.00 | 33.62 | 4.18 | 25.54 | 245 | 0.06 |
| 30 | 11.24 | 33.60 | 4.07 | 234 | 30 | 11.24 | 33.60 | 4.07 | 25.66 | 234 | 0.09 |
| 40 | 10.76 | 33.71 | 3.31 | 217 | 50 | 10.36 | 33.75 | 1.87 | 25.94 | 208 | 0.13 |
| 50 | 10.36 | 33.75 | 1.87 | 208 | | | | | | | |

SPENCER F. BAIRD; August 13, 1952; 1954 GCT; 28°29.5'N, 114°40.5'W; sounding, 55 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 30°. 118$^5$.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.8 | 33.58 | 5.78 | 391 | 0 | 18.8 | 33.58 | 5.78 | 24.01 | 391 | 0.00 |
| 9 | 18.57 | 33.58 | 5.73 | 386 | 10 | 18.52 | 33.58 | 5.73 | 24.08 | 385 | 0.04 |
| 17 | 18.16 | 33.58 | 5.78 | 376 | 20 | 17.99 | 33.58 | 5.78 | 24.21 | 372 | 0.08 |
| 35 | 17.00 | 33.58 | 5.73 | 349 | 30 | 17.30 | 33.58 | 5.75 | 24.37 | 356 | 0.11 |
| 52 | 12.66 | 33.48 | 5.31 | 268 | 50 | 13.05 | 33.49 | 5.39 | 25.23 | 274 | 0.18 |
| 69 | 11.50 | 33.64 | 4.05 | 235 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 118.35 | SPENCER F. BAIRD; August 13, 1952; 1638 GCT; 28°20.5'N, 115°04'W; sounding, 70 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 19°. | | | | | | | | | | |
| 0 | 18.9 | 33.62 | 5.67 | 391 | 0 | 18.9 | 33.62 | 5.67 | 24.01 | 391 | 0.00 |
| 12 | 18.81 | 33.60 | 5.66 | 390 | 10 | 18.85 | 33.60 | 5.65 | 24.01 | 391 | 0.04 |
| 34 | 17.82 | 33.53 | 5.99 | 372 | 20 | 18.56 | 33.58 | 5.75 | 24.07 | 385 | 0.08 |
| 51 | 12.70 | 33.60 | 4.45 | 260 | 30 | 18.12 | 33.54 | 5.96 | 24.15 | 378 | 0.12 |
| 71 | 10.62 | 33.89 | 2.25 | 202 | 50 | 13.00 | 33.59 | 4.58 | 25.32 | 266 | 0.18 |
| 95 | 10.76 | 33.96 | 1.97 | 199 | 75 | 10.63 | 33.91 | 2.18 | 26.01 | 200 | 0.24 |
| 119.33 | SPENCER F. BAIRD; August 17, 1952; 1430 GCT; 28°17'N, 114°54'W; sounding, 60 fm; wind, 360°, force 2; weather, partly cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | 19.8 | 33.60 | 5.40 | 414 | 0 | 19.8 | 33.60 | 5.40 | 23.77 | 414 | 0.00 |
| 10 | 19.51 | 33.60 | 5.40 | 407 | 10 | 19.51 | 33.60 | 5.40 | 23.84 | 407 | 0.04 |
| 25 | 18.56 | 33.57 | 5.63 | 386 | 20 | 18.90 | 33.58 | 5.55 | 23.98 | 394 | 0.08 |
| 50 | 17.42 | 33.57 | 5.68 | 360 | 30 | 18.34 | 33.57 | 5.65 | 24.11 | 381 | 0.12 |
| 75 | 12.12 | 33.49 | 4.81 | 257 | 50 | 17.42 | 33.57 | 5.68 | 24.34 | 360 | 0.19 |
| 100 | 10.58 | 33.89 | 1.15 | 201 | 75 | 12.12 | 33.49 | 4.81 | 25.41 | 257 | 0.27 |
| | | | | | 100 | 10.58 | 33.89 | 1.15 | 26.01 | 201 | 0.33 |
| 119.42 | SPENCER F. BAIRD; August 14, 1952; 2000 GCT; 28°00'N, 115°29'W; sounding, 60 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 17.6 | 33.49 | 5.56 | 370 | 0 | 17.6 | 33.49 | 5.56 | 24.23 | 370 | 0.00 |
| 10 | 16.49 | 33.51 | 5.83 | 343 | 10 | 16.49 | 33.51 | 5.83 | 24.51 | 343 | 0.04 |
| 25 | 15.94 | 33.55 | 5.44 | 328 | 20 | 16.10 | 33.54 | 5.63 | 24.62 | 333 | 0.07 |
| 50 | 11.94 | 33.46 | 4.74 | 256 | 30 | 15.70 | 33.54 | 5.25 | 24.71 | 324 | 0.10 |
| 75 | 11.82 | 33.97 | 1.57 | 216 | 50 | 11.94 | 33.46 | 4.74 | 25.43 | 256 | 0.16 |
| 100 | 11.81 | 34.24 | 0.48 | 196 | 75 | 11.82 | 33.97 | 1.57 | 25.84 | 216 | 0.22 |
| | | | | | 100 | 11.81 | 34.24 | 0.48 | 26.05 | 196 | 0.27 |
| 120.25 | SPENCER F. BAIRD; August 14, 1952; 0232 GCT; 28°23'N, 114°15'W; sounding, 30 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 17.35 | 33.53 | 6.16 | 361 | 0 | 17.35 | 33.53 | 6.16 | 24.32 | 361 | 0.00 |
| 10 | 17.38 | 33.57 | 6.16 | 359 | 10 | 17.38 | 33.57 | 6.16 | 24.35 | 359 | 0.04 |
| 20 | 14.41 | 33.62 | 7.18 | 291 | 20 | 14.41 | 33.62 | 7.18 | 25.06 | 291 | 0.07 |
| 30 | 11.78 | 33.60 | 4.21 | 243 | 30 | 11.78 | 33.60 | 4.21 | 25.56 | 243 | 0.10 |
| 39 | 11.46 | 33.62 | 4.13 | 236 | | | | | | | |
| 120.30 | SPENCER F. BAIRD; August 14, 1952; 0458 GCT; 28°13'N, 114°33'W; sounding, 50 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 25°. | | | | | | | | | | |
| 0 | 18.7 | 33.60 | - | 387 | 0 | 18.7 | 33.60 | | 24.05 | 387 | 0.00 |
| 9 | 18.64 | 33.57 | 6.55 | 388 | 10 | 18.64 | 33.57 | 6.54 | 24.04 | 388 | 0.04 |
| 18 | 18.56 | 33.58 | 5.71 | 385 | 20 | 18.50 | 33.58 | 5.76 | 24.08 | 384 | 0.08 |
| 27 | 18.10 | 33.60 | 6.92 | 373 | 30 | 17.80 | 33.60 | 6.88 | 24.27 | 366 | 0.12 |
| 45 | 17.00 | 33.57 | 6.10 | 350 | 50 | 15.95 | 33.56 | 5.75 | 24.67 | 328 | 0.18 |
| 68 | 11.82 | 33.55 | 4.71 | 247 | | | | | | | |
| 120.35 | SPENCER F. BAIRD; August 14, 1952; 0949 GCT; 28°02.5'N, 114°54'W; sounding, 47 fm; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | 18.7 | 33.57 | 5.76 | 390 | 0 | 18.7 | 33.57 | 5.76 | 24.03 | 390 | 0.00 |
| 10 | 18.60 | 33.58 | 5.78 | 386 | 10 | 18.60 | 33.58 | 5.78 | 24.06 | 386 | 0.04 |
| 20 | 18.52 | 33.58 | 5.89 | 385 | 20 | 18.52 | 33.58 | 5.89 | 24.08 | 385 | 0.08 |
| 30 | 18.13 | 33.57 | 5.93 | 376 | 30 | 18.13 | 33.57 | 5.93 | 24.17 | 376 | 0.12 |
| 40 | 17.70 | 33.58 | 6.01 | 365 | 50 | 16.02 | 33.57 | 5.72 | 24.66 | 329 | 0.19 |
| 50 | 16.02 | 33.57 | 5.72 | 329 | | | | | | | |
| 120.35 | SPENCER F. BAIRD; August 17, 1952; 1030 GCT; 28°03'N, 114°54.5'W; sounding, 47 fm; wind, 220°, force 1; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 19.9 | 33.57 | 5.53 | 419 | 0 | 19.9 | 33.57 | 5.53 | 23.72 | 419 | 0.00 |
| 10 | 19.41 | 33.60 | 5.51 | 404 | 10 | 19.41 | 33.60 | 5.51 | 23.87 | 404 | 0.04 |
| 20 | 18.80 | 33.60 | 5.63 | 390 | 20 | 18.80 | 33.60 | 5.63 | 24.02 | 390 | 0.08 |
| 30 | 18.30 | 33.58 | 5.80 | 379 | 30 | 18.30 | 33.58 | 5.80 | 24.13 | 379 | 0.12 |
| 40 | 17.36 | 33.58 | 5.78 | 358 | 50 | 16.30 | 33.57 | | 24.60 | 335 | 0.19 |
| 50 | 16.30 | 33.57 | - | 335 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

SPENCER F. BAIRD; August 14, 1952; 2204 GCT; 27°49.5'N, 115°27'W; sounding, 89 fm; wind, 340°, force 2; weather, partly cloudy; sea, moderate; wire angle, 07°. 120.43

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.1 | 33.57 | 5.64 | 352 | 0 | 17.1 | 33.57 | 5.64 | 24.41 | 352 | 0.00 |
| 10 | 16.20 | 33.62 | 5.60 | 329 | 10 | 16.20 | 33.62 | 5.60 | 24.66 | 329 | 0.03 |
| 25 | 12.82 | 33.60 | 4.05 | 262 | 20 | 13.72 | 33.61 | 4.69 | 25.19 | 278 | 0.06 |
| 50 | 11.69 | 33.87 | 2.10 | 222 | 30 | 12.46 | 33.63 | 3.57 | 25.46 | 253 | 0.09 |
| 74 | 11.88 | 34.23 | 0.89 | 198 | 50 | 11.69 | 33.87 | 2.10 | 25.79 | 222 | 0.14 |

SPENCER F. BARID; August 17, 1952; 0711 GCT; 28°01'N, 114°27'W; sounding, 24 fm; wind, 320°, force 1; weather, clear; sea, slight; wire angle, 00°. 121.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.2 | 33.58 | 5.65 | 401 | 0 | 19.2 | 33.58 | 5.65 | 23.91 | 401 | 0.00 |
| 10 | - | 33.56 | 5.78 | | 10 | 18.8 | 33.56 | 5.78 | 23.99 | 393 | 0.04 |
| 20 | 18.14 | 33.55 | 5.84 | 378 | 20 | 18.14 | 33.55 | 5.84 | 24.15 | 378 | 0.08 |
| 30 | 17.72 | 33.53 | 5.79 | 369 | 30 | 17.72 | 33.53 | 5.79 | 24.24 | 369 | 0.12 |

SPENCER F. BAIRD; August 14, 1952; 0637 GCT; 28°02'N, 114°28'W; sounding, 32 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 07°. 121.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.4 | 33.56 | 5.85 | 360 | 0 | 17.4 | 33.56 | 5.85 | 24.34 | 360 | 0.00 |
| 10 | 17.27 | 33.55 | 6.04 | 358 | 10 | 17.27 | 33.55 | 6.04 | 24.36 | 358 | 0.04 |
| 20 | 15.66 | 33.35 | 6.50 | 337 | 20 | 15.66 | 33.35 | 6.50 | 24.58 | 337 | 0.07 |
| 29 | 13.68 | 33.31 | 6.43 | 300 | 30 | 13.56 | 33.31 | 6.40 | 24.99 | 297 | 0.10 |
| 39 | 12.96 | 33.35 | 5.78 | 283 | | | | | | | |
| 45 | 12.29 | 33.43 | 5.32 | 265 | | | | | | | |

SPENCER F. BAIRD; August 17, 1952; 0853 GCT; 27°54.5'N, 114°44.5'W; sounding, 32 fm; wind, 140°, force 1; weather, clear; sea, slight; wire angle, 05°. 121.34

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.6 | 33.57 | 5.58 | 411 | 0 | 19.6 | 33.57 | 5.58 | 23.80 | 411 | 0.00 |
| 10 | 19.40 | 33.58 | 5.62 | 406 | 10 | 19.40 | 33.58 | 5.62 | 23.86 | 406 | 0.04 |
| 20 | 18.67 | 33.55 | 5.88 | 390 | 20 | 18.67 | 33.55 | 5.88 | 24.02 | 390 | 0.08 |
| 30 | 17.53 | 33.55 | 5.93 | 364 | 30 | 17.53 | 33.55 | 5.93 | 24.30 | 364 | 0.12 |
| 40 | 15.01 | 33.37 | 6.80 | 322 | 50 | 13.29 | 33.40 | 6.55 | 25.12 | 286 | 0.18 |
| 50 | 13.29 | 33.40 | 6.55 | 286 | | | | | | | |

SPENCER F. BAIRD; August 15, 1952; 0016 GCT; 27°40.5'N, 115°10.5'W; sounding, 30 fm; wind, 360°, force 2; weather, cloudy; sea, slight; wire angle, 03°. 121.41

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.8 | 33.66 | 6.20 | 339 | 0 | 16.8 | 33.66 | 6.20 | 24.55 | 339 | 0.00 |
| 10 | 15.13 | 33.64 | 5.80 | 305 | 10 | 15.13 | 33.64 | 5.80 | 24.92 | 305 | 0.03 |
| 20 | 12.38 | 33.42 | 4.71 | 267 | 20 | 12.38 | 33.42 | 4.71 | 25.31 | 267 | 0.06 |
| 30 | 11.64 | 33.42 | 4.33 | 254 | 30 | 11.64 | 33.42 | 4.33 | 25.45 | 254 | 0.09 |
| 40 | 11.36 | 33.55 | 3.72 | 239 | 50 | 11.37 | 33.68 | 3.14 | 25.70 | 230 | 0.14 |
| 50 | 11.37 | 33.68 | 3.14 | 230 | | | | | | | |

SPENCER F. BAIRD; August 17, 1952; 0521 GCT; 28°09.5'N, 114°11.5'W; sounding, 9 fm; wind, 320°, force 1; weather, clear; sea, slight; wire angle, 00°. $121^{3}.26$

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.9 | 33.51 | 5.88 | 399 | 0 | 18.9 | 33.51 | 5.88 | 23.93 | 399 | 0.00 |
| 5 | 18.66 | 33.53 | 5.94 | 391 | 10 | 17.88 | 33.55 | 6.00 | 24.21 | 372 | 0.04 |
| 10 | 17.88 | 33.55 | 6.00 | 372 | | | | | | | |

SPENCER F. BAIRD; August 16, 1952; 1730 GCT; 28°02.5'N, 114°16'W; sounding, 8 fm; wind, calm; weather, partly cloudy; sea, calm; wire angle, 00°. $121^{5}.28$

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.2 | 33.51 | 5.86 | 406 | 0 | 19.2 | 33.51 | 5.86 | 23.85 | 406 | 0.00 |
| 5 | 18.13 | 33.51 | 5.91 | 380 | 10 | 17.6 | 33.51 | 6.01 | 24.25 | 368 | 0.04 |
| 10 | 17.6 | 33.51 | 6.01 | 368 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 60.55 | PAOLINA-T; September 17, 1952; 0907 GCT; 37°49'N, 123°14.5'W; sounding, 53 fm; wind, 360°, force 1; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 12.22 | 33.28 | 7.84 | 274 | 0 | 12.22 | 33.28 | 7.84 | 25.23 | 274 | 0.00 |
| 10 | 10.40 | 33.35 | 5.94 | 238 | 10 | 10.40 | 33.35 | 5.94 | 25.62 | 238 | 0.03 |
| 20 | 9.88 | 33.44 | 4.80 | 223 | 20 | 9.88 | 33.44 | 4.80 | 25.78 | 223 | 0.05 |
| 29 | 9.62 | 33.53 | 4.64 | 212 | 30 | 9.60 | 33.53 | 4.62 | 25.89 | 212 | 0.07 |
| 49 | 9.21 | 33.48 | 4.20 | 210 | 50 | 9.17 | 33.48 | 4.17 | 25.92 | 209 | 0.11 |
| 75 | 8.90 | 33.73 | 2.35 | 186 | 75 | 8.90 | 33.73 | 2.35 | 26.16 | 186 | 0.16 |
| 60.60 | PAOLINA-T; September 17, 1952; 1552 GCT; 37°38'N, 123°36.5'W; sounding, 1820 fm; wind, 170°, force 1; weather, overcast; sea, moderate; wire angle, 21°. | | | | | | | | | | |
| 0 | 16.13 | 32.84 | 6.11 | 384 | 0 | 16.13 | 32.84 | 6.11 | 24.08 | 384 | 0.00 |
| 9 | 15.67 | 32.92 | 6.43 | 369 | 10 | 15.58 | 32.92 | 6.43 | 24.26 | 367 | 0.04 |
| 24 | 13.56 | 32.97 | 6.38 | 322 | 20 | 14.24 | 32.95 | 6.42 | 24.58 | 337 | 0.07 |
| 46 | 10.19 | 33.15 | 5.59 | 249 | 30 | 12.70 | 33.03 | 6.30 | 24.95 | 302 | 0.10 |
| 70 | 9.66 | 33.26 | 4.95 | 233 | 50 | 10.12 | 33.17 | 5.49 | 25.53 | 247 | 0.16 |
| 94 | 9.06 | 33.48 | 4.21 | 207 | 75 | 9.53 | 33.32 | 4.80 | 25.74 | 226 | 0.22 |
| 146 | 8.23 | 33.73 | 3.37 | 176 | 100 | 8.96 | 33.50 | 4.07 | 25.97 | 204 | 0.27 |
| 190 | 8.01 | 33.95 | 2.31 | 157 | 150 | 8.20 | 33.75 | 3.29 | 26.28 | 175 | 0.37 |
| 280 | 7.21 | 33.98 | 1.90 | 144 | 200 | 7.93 | 33.96 | 2.24 | 26.49 | 155 | 0.45 |
| 374 | 6.50 | 34.05 | 1.63 | 129 | 250 | 7.47 | 33.97 | 2.01 | 26.56 | 148 | 0.53 |
| 464 | 5.97 | 34.14 | 0.76 | 116 | 300 | 7.04 | 33.99 | 1.86 | 26.64 | 141 | 0.61 |
| 560 | 5.44 | 34.23 | 0.48 | 103 | 400 | 6.35 | 34.08 | 1.48 | 26.80 | 125 | 0.74 |
| 749 | 4.54 | 34.33 | 0.38 | 86 | 500 | 5.79 | 34.18 | 0.60 | 26.95 | 111 | 0.87 |
| 938 | 3.92 | 34.40 | 0.42 | 75 | 600 | 5.25 | 34.25 | 0.44 | 27.07 | 100 | 0.98 |
| 1139 | 3.46 | 34.43 | 0.71 | 68 | 700 | 4.75 | 34.31 | 0.39 | 27.18 | 90 | 1.08 |
| | | | | | 800 | 4.35 | 34.35 | 0.39 | 27.25 | 83 | 1.17 |
| | | | | | 1000 | 3.77 | 34.41 | 0.49 | 27.36 | 72 | 1.35 |
| 60.70 | PAOLINA-T; September 17, 1952; 2212 GCT; 37°20'N, 124°20'W; sounding, 2050 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 16°. | | | | | | | | | | |
| 0 | 16.16 | 32.86 | 5.70 | 384 | 0 | 16.16 | 32.86 | 5.70 | 24.09 | 384 | 0.00 |
| 9 | 15.92 | 32.89 | 5.80 | 376 | 10 | 15.90 | 32.89 | 5.81 | 24.17 | 376 | 0.04 |
| 19 | 15.40 | 32.92 | 6.08 | 363 | 20 | 15.26 | 32.92 | 6.13 | 24.33 | 360 | 0.07 |
| 33 | 12.74 | 32.84 | 6.49 | 316 | 30 | 13.40 | 32.86 | 6.47 | 24.68 | 327 | 0.11 |
| 48 | 10.65 | 32.77 | 5.98 | 285 | 50 | 10.40 | 32.77 | 5.69 | 25.17 | 281 | 0.17 |
| 62 | 9.68 | 33.01 | 5.28 | 252 | 75 | 9.23 | 33.17 | 4.95 | 25.67 | 233 | 0.23 |
| 76 | 9.22 | 33.17 | 4.93 | 233 | 100 | 8.65 | 33.36 | 4.17 | 25.91 | 210 | 0.29 |
| 94 | 8.64 | 33.33 | 4.36 | 212 | 150 | 8.17 | 33.78 | 3.07 | 26.31 | 172 | 0.39 |
| 143 | 8.23 | 33.75 | 3.18 | 175 | 200 | 7.75 | 33.96 | 2.70 | 26.52 | 153 | 0.47 |
| 188 | 7.90 | 33.93 | 2.75 | 157 | 250 | 7.16 | 34.01 | 2.30 | 26.64 | 141 | 0.54 |
| 233 | 7.32 | 34.00 | 2.45 | 144 | 300 | 6.73 | 34.03 | 1.73 | 26.71 | 134 | 0.62 |
| 279 | 6.86 | 34.02 | 1.96 | 136 | 400 | 6.04 | 34.09 | 1.02 | 26.85 | 121 | 0.75 |
| 377 | 6.20 | 34.07 | 1.15 | 124 | 500 | 5.55 | 34.16 | 0.57 | 26.97 | 110 | 0.87 |
| 471 | 5.65 | 34.13 | 0.68 | 113 | | | | | | | |
| 576 | 5.38 | 34.23 | 0.43 | 103 | | | | | | | |
| 60.80 | PAOLINA-T; September 18, 1952; 0433 GCT; 37°01.5'N, 125°01'W; sounding, 2360 fm; wind, 300°, force 1; weather, missing; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 16.70 | 32.97 | 5.74 | 387 | 0 | 16.70 | 32.97 | 5.74 | 24.05 | 387 | 0.00 |
| 10 | 16.72 | 32.97 | 5.80 | 388 | 10 | 16.72 | 32.97 | 5.80 | 24.04 | 388 | 0.04 |
| 25 | 16.66 | 32.99 | 5.75 | 385 | 20 | 16.69 | 32.98 | 5.73 | 24.06 | 386 | 0.08 |
| 50 | 11.13 | 32.94 | 6.21 | 280 | 30 | 16.63 | 32.99 | 5.78 | 24.08 | 384 | 0.12 |
| 75 | 9.18 | 33.03 | 5.31 | 242 | 50 | 11.13 | 32.94 | 6.21 | 25.17 | 280 | 0.18 |
| 99 | 8.44 | 33.31 | 4.59 | 211 | 75 | 9.18 | 33.03 | 5.31 | 25.57 | 242 | 0.25 |
| 152 | 8.02 | 33.84 | 2.95 | 165 | 100 | 8.43 | 33.31 | 4.55 | 25.91 | 211 | 0.31 |
| 200 | 7.64 | 34.00 | 2.23 | 148 | 150 | 8.06 | 33.83 | 3.03 | 26.37 | 167 | 0.40 |
| 298 | 6.58 | 34.02 | 1.54 | 133 | 200 | 7.64 | 34.00 | 2.23 | 26.56 | 148 | 0.48 |
| 399 | 5.55 | 34.02 | 0.96 | 120 | 250 | 7.13 | 34.01 | 1.83 | 26.64 | 141 | 0.55 |
| 497 | 5.16 | 34.13 | 0.59 | 108 | 300 | 6.53 | 34.02 | 1.51 | 26.73 | 132 | 0.63 |
| 598 | 4.78 | 34.27 | 0.38 | 93 | 400 | 5.55 | 34.02 | 0.95 | 26.86 | 120 | 0.76 |
| 799 | 4.24 | 34.40 | 0.36 | 78 | 500 | 5.13 | 34.13 | 0.57 | 26.99 | 107 | 0.87 |
| 996 | 3.70 | 34.45 | 0.52 | 69 | 600 | 4.77 | 34.27 | 0.38 | 27.14 | 93 | 0.98 |
| 1203 | 3.10 | 34.47 | 0.69 | 62 | 700 | 4.50 | 34.35 | 0.37 | 27.24 | 84 | 1.08 |
| | | | | | 800 | 4.23 | 34.40 | 0.36 | 27.31 | 78 | 1.16 |
| | | | | | 1000 | 3.69 | 34.45 | 0.53 | 27.40 | 69 | 1.33 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

PAOLINA-T; September 18, 1952; 1125 GCT; 36°37.5'N, 125°47'W; sounding, 2500 fm; wind, 310°, force 2; weather, overcast; sea, missing; wire angle, 05°. 60.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.74 | 33.06 | 5.59 | 382 | 0 | 16.74 | 33.06 | 5.59 | 24.11 | 382 | 0.00 |
| 10 | 16.77 | 32.97 | 5.89 | 389 | 10 | 16.77 | 32.97 | 5.89 | 24.03 | 389 | 0.04 |
| 20 | 16.78 | 32.99 | 5.88 | 388 | 20 | 16.78 | 32.99 | 5.88 | 24.05 | 388 | 0.08 |
| 35 | 14.77 | 33.01 | 5.87 | 343 | 30 | 16.20 | 33.00 | 5.87 | 24.19 | 374 | 0.12 |
| 50 | 11.34 | 33.03 | 5.96 | 277 | 50 | 11.34 | 33.03 | 5.96 | 25.20 | 277 | 0.18 |
| 65 | 9.22 | 33.21 | 5.34 | 230 | 75 | 8.80 | 33.23 | 4.88 | 25.79 | 222 | 0.24 |
| 80 | 8.63 | 33.24 | 4.65 | 219 | 100 | 8.27 | 33.43 | 3.64 | 26.02 | 199 | 0.30 |
| 99 | 8.28 | 33.42 | 3.67 | 200 | 150 | 7.84 | 33.84 | 3.06 | 26.41 | 163 | 0.39 |
| 152 | 7.82 | 33.84 | 3.03 | 163 | 200 | 7.46 | 33.96 | 2.30 | 26.56 | 149 | 0.47 |
| 200 | 7.46 | 33.96 | 2.30 | 149 | 250 | 7.00 | 34.07 | 1.65 | 26.71 | 134 | 0.54 |
| 248 | 7.03 | 34.07 | 1.66 | 135 | 300 | 6.41 | 34.02 | 1.42 | 26.75 | 131 | 0.61 |
| 296 | 6.44 | 34.02 | 1.43 | 131 | 400 | 5.65 | 34.09 | 0.89 | 26.90 | 116 | 0.74 |
| 398 | 5.66 | 34.09 | 0.90 | 116 | 500 | 5.07 | 34.14 | 0.54 | 27.01 | 106 | 0.85 |
| 497 | 5.10 | 34.14 | 0.57 | 106 | 600 | 4.69 | 34.25 | 0.36 | 27.14 | 94 | 0.96 |
| 604 | 4.67 | 34.25 | 0.35 | 93 | | | | | | | |

PAOLINA-T; September 19, 1952; 0032 GCT; 35°55.5'N, 126°11'W; sounding, 2750 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 05°. 60.110

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.32 | 32.90 | 5.50 | 406 | 0 | 17.32 | 32.90 | 5.50 | 23.85 | 406 | 0.00 |
| 10 | 17.33 | 32.83 | 5.51 | 412 | 10 | 17.33 | 32.83 | 5.51 | 23.79 | 412 | 0.04 |
| 21 | 17.34 | 32.83 | 5.56 | 412 | 20 | 17.34 | 32.83 | 5.56 | 23.79 | 412 | 0.08 |
| 36 | 17.29 | 32.84 | 5.51 | 410 | 30 | 17.32 | 32.84 | 5.53 | 23.80 | 411 | 0.12 |
| 50 | 15.58 | 32.83 | 5.89 | 373 | 50 | 15.58 | 32.83 | 5.89 | 24.20 | 373 | 0.20 |
| 65 | 13.22 | 32.81 | 6.30 | 328 | 75 | 12.00 | 32.81 | 6.27 | 24.91 | 305 | 0.29 |
| 79 | 11.62 | 32.81 | 6.18 | 298 | 100 | 10.21 | 32.85 | 5.69 | 25.26 | 272 | 0.36 |
| 98 | 10.27 | 32.84 | 5.72 | 274 | 150 | 8.79 | 33.53 | 3.94 | 26.02 | 199 | 0.48 |
| 151 | 8.78 | 33.53 | 3.90 | 199 | 200 | 8.33 | 33.87 | 2.68 | 26.36 | 168 | 0.57 |
| 199 | 8.34 | 33.86 | 2.69 | 168 | 250 | 7.70 | 33.98 | 2.60 | 26.54 | 150 | 0.65 |
| 248 | 7.72 | 33.98 | 2.61 | 151 | 300 | 7.04 | 33.93 | 2.33 | 26.59 | 145 | 0.73 |
| 296 | 7.07 | 33.93 | 2.37 | 146 | 400 | 6.08 | 33.99 | 1.21 | 26.77 | 129 | 0.87 |
| 396 | 6.10 | 33.98 | 1.23 | 130 | 500 | 5.45 | 34.09 | 0.67 | 26.92 | 114 | 1.00 |
| 495 | 5.48 | 34.09 | 0.69 | 114 | 600 | 5.15 | 34.23 | 0.36 | 27.07 | 100 | 1.11 |
| 601 | 5.14 | 34.23 | 0.36 | 100 | | | | | | | |

PAOLINA-T; September 15, 1952; 1416 GCT; 37°18'N, 122°35.5'W; sounding, 45 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 02°. 63.52

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.79 | 33.37 | 7.60 | 278 | 0 | 12.79 | 33.37 | 7.60 | 25.19 | 278 | 0.00 |
| 10 | 11.33 | 33.33 | 6.49 | 255 | 10 | 11.33 | 33.33 | 6.49 | 25.44 | 255 | 0.03 |
| 20 | 9.98 | 33.37 | 4.93 | 230 | 20 | 9.98 | 33.37 | 4.93 | 25.70 | 230 | 0.05 |
| 30 | 9.42 | 33.53 | 4.06 | 209 | 30 | 9.42 | 33.53 | 4.06 | 25.92 | 209 | 0.07 |
| 50 | 8.97 | 33.69 | 2.56 | 190 | 50 | 8.97 | 33.69 | 2.56 | 26.12 | 190 | 0.11 |

PAOLINA-T; September 15, 1952; 1609 GCT; 37°16.5'N, 122°49'W; sounding, 90 fm; wind, calm; weather. cloudy; sea, slight; wire angle, 05°. 63.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.14 | 33.08 | 6.23 | 288 | 0 | 12.14 | 33.08 | 6.23 | 25.09 | 288 | 0.00 |
| 10 | 11.03 | 33.08 | 5.93 | 268 | 10 | 11.03 | 33.08 | 5.93 | 25.30 | 268 | 0.03 |
| 25 | 9.68 | 33.04 | 5.05 | 249 | 20 | 9.70 | 33.05 | 5.30 | 25.50 | 249 | 0.05 |
| 50 | 9.44 | 33.49 | 3.73 | 212 | 30 | 9.69 | 33.07 | 4.72 | 25.52 | 247 | 0.08 |
| 75 | 8.94 | 33.68 | 2.92 | 191 | 50 | 9.44 | 33.49 | 3.73 | 25.89 | 212 | 0.12 |
| 100 | 8.54 | 33.77 | 2.84 | 178 | 75 | 8.94 | 33.68 | 2.92 | 26.12 | 191 | 0.18 |
| 125 | 8.61 | 33.96 | 2.18 | 165 | 100 | 8.54 | 33.77 | 2.84 | 26.25 | 178 | 0.22 |
| 155 | 8.65 | 33.96 | 1.93 | 166 | 150 | 8.64 | 33.96 | 1.97 | 26.38 | 165 | 0.31 |

PAOLINA-T; September 15, 1952; 0745 GCT; 36°49'N, 122°04.5'W; sounding, 55 fm; wind, calm; weather, overcast; sea, missing; wire angle, 00°. 67.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.92 | 33.42 | 6.32 | 259 | 0 | 11.92 | 33.42 | 6.32 | 25.40 | 259 | 0.00 |
| 10 | 10.66 | 33.49 | 4.94 | 232 | 10 | 10.66 | 33.49 | 4.94 | 25.68 | 232 | 0.02 |
| 20 | 10.32 | 33.48 | 4.41 | 227 | 20 | 10.32 | 33.48 | 4.41 | 25.73 | 227 | 0.05 |
| 30 | 9.89 | 33.55 | 3.80 | 215 | 30 | 9.89 | 33.55 | 3.80 | 25.86 | 215 | 0.07 |
| 50 | 9.49 | 33.78 | 2.99 | 192 | 50 | 9.49 | 33.78 | 2.99 | 26.11 | 192 | 0.11 |
| 76 | 9.23 | 33.86 | 2.34 | 182 | 75 | 9.24 | 33.86 | 2.36 | 26.21 | 182 | 0.16 |

SIO

CCOFI 5209

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

67.55 PAOLINA-T; September 15, 1952; 0424 GCT; 36°39'N, 122°25.5'W; sounding, 1100 fm; wind, calm; weather, overcast; sea, missing; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.60 | 33.31 | 6.94 | 298 | 0 | 13.60 | 33.31 | 6.94 | 24.98 | 298 | 0.00 |
| 10 | 12.72 | 33.39 | 6.20 | 276 | 10 | 12.72 | 33.39 | 6.20 | 25.22 | 276 | 0.03 |
| 20 | 11.94 | 33.39 | 5.89 | 261 | 20 | 11.94 | 33.39 | 5.89 | 25.37 | 261 | 0.06 |
| 35 | 10.50 | 33.48 | 4.63 | 230 | 30 | 10.92 | 33.44 | 5.15 | 25.60 | 240 | 0.08 |
| 50 | 9.66 | 33.64 | 3.76 | 205 | 50 | 9.66 | 33.64 | 3.76 | 25.97 | 205 | 0.13 |
| 65 | 9.53 | 33.73 | 2.88 | 196 | 75 | 9.43 | 33.78 | 2.53 | 26.12 | 191 | 0.18 |
| 80 | 9.32 | 33.80 | 2.45 | 187 | 100 | 9.17 | 33.86 | 2.54 | 26.22 | 181 | 0.22 |
| 99 | 9.18 | 33.86 | 2.54 | 181 | 150 | 8.83 | 33.96 | 2.28 | 26.35 | 168 | 0.31 |
| 153 | 8.81 | 33.96 | 2.26 | 168 | 200 | 8.26 | 33.98 | 1.88 | 26.46 | 158 | 0.39 |
| 202 | 8.24 | 33.98 | 1.88 | 158 | 250 | 7.68 | 33.98 | 2.04 | 26.54 | 150 | 0.47 |
| 251 | 7.68 | 33.98 | 2.05 | 150 | 300 | 7.67 | 34.11 | 1.55 | 26.64 | 140 | 0.55 |
| 300 | 7.67 | 34.11 | 1.55 | 140 | 400 | 6.93 | 34.16 | 0.94 | 26.79 | 127 | 0.69 |
| 403 | 6.89 | 34.16 | 0.92 | 126 | 500 | 5.99 | 34.16 | 0.74 | 26.91 | 115 | 0.81 |
| 503 | 5.96 | 34.16 | 0.73 | 115 | 600 | 5.22 | 34.20 | 0.45 | 27.04 | 103 | 0.93 |
| 607 | 5.18 | 34.20 | 0.44 | 103 | | | | | | | |

67.65 PAOLINA-T; September 14, 1952; 2230 GCT; 36°19'N, 123°09'W; sounding, 1750 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.14 | 33.24 | 5.91 | 334 | 0 | 15.14 | 33.24 | 5.91 | 24.61 | 334 | 0.00 |
| 10 | 13.72 | 33.24 | 6.12 | 306 | 10 | 13.72 | 33.24 | 6.12 | 24.91 | 306 | 0.03 |
| 20 | 13.18 | 33.53 | 6.08 | 274 | 20 | 13.18 | 33.53 | 6.08 | 25.24 | 274 | 0.06 |
| 35 | 11.53 | 33.51 | 5.32 | 245 | 30 | 11.82 | 33.52 | 5.57 | 25.49 | 250 | 0.09 |
| 50 | 10.86 | 33.55 | 4.52 | 231 | 50 | 10.86 | 33.55 | 4.52 | 25.69 | 231 | 0.14 |
| 65 | 9.78 | 33.68 | 3.33 | 204 | 75 | 9.40 | 33.68 | 3.27 | 26.04 | 198 | 0.19 |
| 79 | 9.31 | 33.68 | 3.20 | 196 | 100 | 9.02 | 33.74 | 2.79 | 26.15 | 187 | 0.24 |
| 98 | 9.04 | 33.73 | 2.86 | 188 | 150 | 8.22 | 33.93 | 2.11 | 26.42 | 161 | 0.33 |
| 150 | 8.22 | 33.93 | 2.11 | 161 | 200 | 7.82 | 34.04 | 1.73 | 26.57 | 148 | 0.40 |
| 198 | 7.83 | 34.04 | 1.72 | 148 | 250 | 7.40 | 34.07 | 1.48 | 26.65 | 140 | 0.48 |
| 247 | 7.44 | 34.07 | 1.50 | 140 | 300 | 6.97 | 34.13 | 1.20 | 26.76 | 130 | 0.55 |
| 295 | 7.01 | 34.13 | 1.22 | 130 | 400 | 6.16 | 34.16 | 0.75 | 26.89 | 117 | 0.68 |
| 398 | 6.18 | 34.16 | 0.77 | 117 | 500 | 5.74 | 34.23 | 0.46 | 27.00 | 107 | 0.79 |
| 496 | 5.76 | 34.23 | 0.47 | 107 | 600 | 5.22 | 34.29 | 0.33 | 27.11 | 96 | 0.90 |
| 600 | 5.22 | 34.29 | 0.33 | 96 | | | | | | | |

70.51 PAOLINA-T; September 13, 1952; 1742 GCT; 36°10.5'N, 121°45.5'W; sounding, 180 fm; wind, calm; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.05 | 33.62 | 6.26 | 229 | 0 | 11.05 | 33.62 | 6.26 | 25.71 | 229 | 0.00 |
| 10 | 10.60 | 33.69 | 4.57 | 216 | 10 | 10.60 | 33.69 | 4.57 | 25.85 | 216 | 0.02 |
| 25 | 9.90 | 33.71 | 3.20 | 203 | 20 | 10.00 | 33.71 | 3.50 | 25.97 | 205 | 0.04 |
| 50 | 9.76 | 33.77 | 2.84 | 197 | 30 | 9.86 | 33.72 | 3.11 | 26.00 | 202 | 0.06 |
| 75 | 9.55 | 33.84 | 2.48 | 188 | 50 | 9.76 | 33.77 | 2.84 | 26.05 | 197 | 0.10 |
| 100 | 9.28 | 33.87 | 2.30 | 182 | 75 | 9.55 | 33.84 | 2.48 | 26.14 | 188 | 0.15 |
| 125 | 9.12 | 34.03 | 2.11 | 167 | 100 | 9.28 | 33.87 | 2.30 | 26.21 | 182 | 0.20 |
| 155 | 8.84 | 34.04 | 1.85 | 162 | 150 | 8.89 | 34.04 | 1.90 | 26.40 | 163 | 0.29 |

70.60 PAOLINA-T; September 13, 1952; 2320 GCT; 35°55'N, 122°25'W; sounding, 1750 fm; wind, 300°, force 2; weather, overcast; sea, very rough; wire angle, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.68 | 33.17 | | 330 | 0 | 14.68 | 33.17 | | 24.65 | 330 | 0.00 |
| 10 | 14.50 | 33.24 | | 321 | 10 | 14.50 | 33.24 | | 24.74 | 321 | 0.03 |
| 24 | 14.04 | 33.26 | | 310 | 20 | 14.20 | 33.25 | | 24.81 | 314 | 0.06 |
| 49 | 11.51 | 33.42 | | 252 | 30 | 13.75 | 33.29 | | 24.94 | 302 | 0.10 |
| 73 | 9.26 | 33.55 | | 205 | 50 | 11.20 | 33.43 | | 25.54 | 245 | 0.15 |
| 97 | 9.20 | 33.82 | | 184 | 75 | 9.25 | 33.56 | | 25.97 | 204 | 0.21 |
| 150 | 8.50 | 33.98 | | 162 | 100 | 9.17 | 33.84 | | 26.20 | 182 | 0.26 |
| 198 | 7.67 | 34.02 | | 147 | 150 | 8.50 | 33.98 | | 26.42 | 162 | 0.34 |
| 295 | 7.04 | 34.18 | | 127 | 200 | 7.65 | 34.00 | | 26.56 | 148 | 0.42 |
| 396 | 6.12 | 34.13 | | 119 | 250 | 7.35 | 34.08 | | 26.67 | 138 | 0.50 |
| 494 | 5.67 | 34.20 | | 108 | 300 | 7.00 | 34.18 | | 26.79 | 126 | 0.56 |
| 595 | 5.18 | 34.29 | | 96 | 400 | 6.10 | 34.13 | | 26.87 | 119 | 0.69 |
| 795 | 4.44 | 34.40 | | 80 | 500 | 5.65 | 34.21 | | 26.99 | 107 | 0.81 |
| 992 | 3.86 | 34.42 | | 72 | 600 | 5.15 | 34.29 | | 27.12 | 96 | 0.92 |
| 1196 | 3.39 | 34.45 | | 66 | 700 | 4.75 | 34.36 | | 27.22 | 86 | 1.02 |
| | | | | | 800 | 4.41 | 34.40 | | 27.29 | 79 | 1.11 |
| | | | | | 1000 | 3.85 | 34.42 | | 27.36 | 72 | 1.27 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

PAOLINA-T; September 14, 1952; 0551 GCT; 35°38.5'N, 123°06'W; sounding, 2140 fm; wind, 300°, force 2; weather, partly cloudy; sea, very rough; wire angle, 05°. 70.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.81 | 33.10 | 6.49 | 338 | 0 | 14.81 | 33.10 | 6.49 | 24.57 | 338 | 0.00 |
| 10 | 14.80 | 33.10 | 6.19 | 337 | 10 | 14.80 | 33.10 | 6.19 | 24.57 | 337 | 0.03 |
| 20 | 14.76 | 33.13 | 6.29 | 334 | 20 | 14.76 | 33.13 | 6.29 | 24.60 | 334 | 0.07 |
| 35 | 11.84 | 32.88 | 6.87 | 297 | 30 | 14.60 | 33.10 | 6.84 | 24.62 | 333 | 0.10 |
| 50 | 10.32 | 32.95 | 5.69 | 266 | 50 | 10.32 | 32.95 | 5.69 | 25.32 | 266 | 0.16 |
| 65 | 9.44 | 33.06 | 5.20 | 244 | 75 | 9.20 | 33.18 | 4.78 | 25.68 | 232 | 0.22 |
| 80 | 9.14 | 33.26 | 4.60 | 225 | 100 | 8.75 | 33.91 | 3.88 | 26.33 | 171 | 0.27 |
| 99 | 8.78 | 33.91 | 3.91 | 171 | 150 | 8.24 | 33.84 | 2.87 | 26.35 | 168 | 0.36 |
| 152 | 8.22 | 33.84 | 2.84 | 168 | 200 | 7.73 | 33.98 | 2.26 | 26.53 | 151 | 0.44 |
| 202 | 7.70 | 33.98 | 2.25 | 150 | 250 | 7.08 | 33.98 | 2.20 | 26.63 | 142 | 0.52 |
| 249 | 7.10 | 33.98 | 2.21 | 142 | 300 | 6.53 | 34.07 | 1.73 | 26.77 | 128 | 0.59 |
| 298 | 6.54 | 34.07 | 1.77 | 128 | 400 | 5.86 | 34.13 | 0.86 | 26.90 | 116 | 0.71 |
| 402 | 5.84 | 34.13 | 0.85 | 115 | 500 | 5.26 | 34.13 | 0.47 | 26.98 | 109 | 0.83 |
| 500 | 5.26 | 34.13 | 0.47 | 109 | 600 | 4.90 | 34.23 | 0.38 | 27.10 | 97 | 0.94 |
| 605 | 4.88 | 34.23 | 0.37 | 97 | | | | | | | |

PAOLINA-T; September 14, 1952; 1206 GCT; 35°15'N, 123°47.5'W; sounding, 400 fm; wind, 300°, force 1; weather, missing; sea, slight; wire angle, 05°. 70.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.85 | 32.88 | 5.63 | 397 | 0 | 16.85 | 32.88 | 5.63 | 23.95 | 397 | 0.00 |
| 10 | 16.87 | 32.90 | 5.67 | 396 | 10 | 16.87 | 32.90 | 5.67 | 23.96 | 396 | 0.04 |
| 20 | 16.84 | 32.94 | 5.59 | 393 | 20 | 16.84 | 32.94 | 5.59 | 23.99 | 393 | 0.08 |
| 35 | 14.78 | 32.90 | 6.18 | 352 | 30 | 16.80 | 32.93 | 5.95 | 24.00 | 392 | 0.12 |
| 51 | 12.02 | 32.74 | 6.48 | 311 | 50 | 12.10 | 32.74 | 6.47 | 24.84 | 312 | 0.19 |
| 65 | 11.14 | 32.73 | 5.93 | 296 | 75 | 10.55 | 32.79 | 5.83 | 25.16 | 282 | 0.26 |
| 79 | 10.29 | 32.83 | 5.77 | 275 | 100 | 9.12 | 33.09 | 5.00 | 25.63 | 237 | 0.33 |
| 99 | 9.14 | 33.08 | 5.02 | 238 | 150 | 8.60 | 33.70 | 3.30 | 26.18 | 184 | 0.44 |
| 153 | 8.56 | 33.71 | 3.21 | 183 | 200 | 8.03 | 33.87 | 2.46 | 26.40 | 163 | 0.52 |
| 202 | 8.00 | 33.87 | 2.42 | 163 | 250 | 7.53 | 34.02 | 1.95 | 26.59 | 145 | 0.60 |
| 250 | 7.53 | 34.02 | 1.95 | 145 | 300 | 6.99 | 34.05 | 1.46 | 26.69 | 136 | 0.68 |
| 299 | 7.00 | 34.05 | 1.47 | 136 | 400 | 6.30 | 34.13 | 0.83 | 26.85 | 121 | 0.81 |
| 401 | 6.28 | 34.13 | 0.81 | 121 | 500 | 5.76 | 34.16 | 0.51 | 26.94 | 112 | 0.93 |
| 501 | 5.75 | 34.16 | 0.50 | 112 | 600 | 5.28 | 34.26 | 0.37 | 27.08 | 99 | 1.04 |
| 608 | 5.22 | 34.27 | 0.36 | 98 | | | | | | | |

PAOLINA-T; September 13, 1952; 0100 GCT; 35°37'N, 121°16.5'W; sounding, 45 fm; wind, 300°, force 4; weather, clear; sea, missing; wire angle, 09°. 73.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.43 | 33.57 | 5.07 | 239 | 0 | 11.43 | 33.57 | 5.07 | 25.61 | 239 | 0.00 |
| 10 | 11.11 | 33.65 | 4.76 | 228 | 10 | 11.11 | 33.65 | 4.76 | 25.73 | 228 | 0.02 |
| 20 | 10.76 | 33.64 | 4.38 | 222 | 20 | 10.76 | 33.64 | 4.38 | 25.78 | 222 | 0.05 |
| 30 | 10.28 | 33.64 | 3.74 | 215 | 30 | 10.28 | 33.64 | 3.74 | 25.86 | 215 | 0.07 |
| 49 | 9.91 | 33.64 | 3.11 | 209 | 50 | 9.90 | 33.64 | 3.09 | 25.93 | 208 | 0.11 |
| 74 | 9.44 | 33.82 | 2.63 | 188 | 75 | (9.43) | (33.82) | (2.62) | (26.15) | (188) | (0.16) |

PAOLINA-T; September 13, 1952; 0730 GCT; 35°11'N, 122°00.5'W; sounding, 1650 fm; wind, 290°, force 3; weather, missing; sea, moderate; wire angle, 22°. 73.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.12 | 33.28 | 5.89 | 291 | 0 | 13.12 | 33.28 | 5.89 | 25.06 | 291 | 0.00 |
| 9 | 12.78 | 33.39 | 5.86 | 277 | 10 | 12.76 | 33.39 | 5.87 | 25.21 | 276 | 0.03 |
| 19 | 12.47 | 33.39 | 5.93 | 271 | 20 | 12.41 | 33.39 | 5.92 | 25.28 | 270 | 0.06 |
| 32 | 11.63 | 33.46 | 5.44 | 251 | 30 | 11.79 | 33.45 | 5.62 | 25.45 | 254 | 0.08 |
| 51 | 10.20 | 33.47 | 3.97 | 226 | 50 | 10.26 | 33.47 | 4.01 | 25.73 | 227 | 0.13 |
| 65 | 9.55 | 33.64 | 3.23 | 203 | 75 | 9.39 | 33.64 | 3.10 | 26.01 | 200 | 0.18 |
| 79 | 9.36 | 33.64 | 3.03 | 200 | 100 | 9.04 | 33.73 | 2.69 | 26.14 | 188 | 0.23 |
| 100 | 9.04 | 33.73 | 2.69 | 188 | 150 | 8.55 | 33.91 | 2.22 | 26.36 | 168 | 0.32 |
| 149 | 8.56 | 33.91 | 2.23 | 168 | 200 | 8.17 | 34.07 | 1.76 | 26.54 | 150 | 0.40 |
| 197 | 8.21 | 34.07 | 1.78 | 151 | 250 | 7.54 | 33.98 | 1.69 | 26.56 | 148 | 0.48 |
| 250 | 7.54 | 33.98 | 1.69 | 148 | 300 | 7.30 | 34.09 | 1.50 | 26.68 | 137 | 0.55 |
| 295 | 7.32 | 34.09 | 1.53 | 137 | 400 | 6.81 | 34.11 | 0.87 | 26.77 | 129 | 0.69 |
| 421 | 6.69 | 34.11 | 0.77 | 127 | 500 | 6.06 | 34.15 | 0.53 | 26.90 | 117 | 0.82 |
| 539 | 5.80 | 34.17 | 0.47 | 112 | 600 | 5.46 | | 0.38 | | | |
| 656 | 5.22 | 34.43u | 0.33 | 86 | | | | | | | |

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5209

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| **77.50** | PAOLINA-T; September 12, 1952; 1830 GCT; 35°04.5'N, 120°52'W; sounding, 68 fm; wind, 290°, force 4; weather, clear; sea, missing; wire angle, 15°. | | | | | | | | | | |
| 0 | 11.32 | 33.58 | 4.84 | 236 | 0 | 11.32 | 33.58 | 4.84 | 25.63 | 236 | 0.00 |
| 10 | 11.10 | 33.51 | 4.44 | 238 | 10 | 11.10 | 33.51 | 4.44 | 25.62 | 238 | 0.02 |
| 19 | 10.84 | 33.53 | 4.00 | 232 | 20 | 10.84 | 33.54 | 3.98 | 25.69 | 231 | 0.05 |
| 29 | 10.58 | 33.60 | 3.80 | 222 | 30 | 10.55 | 33.62 | 3.78 | 25.80 | 220 | 0.07 |
| 48 | 9.89 | 33.75 | 2.75 | 200 | 50 | 9.85 | 33.76 | 2.66 | 26.03 | 199 | 0.11 |
| 72 | 9.42 | 33.89 | 2.31 | 182 | 75 | 9.39 | (33.89) | 2.30 | (26.21) | (182) | (0.16) |
| 96 | 9.36 | 33.82 | 2.12 | 187 | | | | | | | |
| **77.55** | PAOLINA-T; September 12, 1952; 1342 GCT; 34°46.5'N, 121°05'W; sounding, 300 fm; wind, 300°, force 6; weather, partly cloudy; sea, moderate; wire angle, 17°. | | | | | | | | | | |
| 0 | 13.43 | 33.44 | 5.82 | 285 | 0 | 13.43 | 33.44 | 5.82 | 25.12 | 285 | 0.00 |
| 9 | 13.42 | 33.44 | 5.84 | 285 | 10 | 13.42 | 33.44 | 5.83 | 25.12 | 285 | 0.03 |
| 24 | 12.80 | 33.39 | 5.56 | 277 | 20 | 13.33 | 33.41 | 5.65 | 25.12 | 286 | 0.06 |
| 48 | 10.86 | 33.26 | 5.08 | 252 | 30 | 12.75 | 33.35 | 5.45 | 25.19 | 279 | 0.09 |
| 71 | 9.41 | 33.62 | 3.58 | 202 | 50 | 10.65 | 33.26 | 4.99 | 25.50 | 249 | 0.14 |
| 96 | 8.98 | 33.68 | 3.21 | 191 | 75 | 9.33 | 33.63 | 3.50 | 26.01 | 200 | 0.19 |
| 148 | 8.76 | 33.96 | 2.42 | 167 | 100 | 8.95 | 33.69 | 3.17 | 26.12 | 190 | 0.24 |
| 199 | 8.38 | 34.09 | 1.61 | 152 | 150 | 8.73 | 33.97 | 2.36 | 26.38 | 166 | 0.33 |
| 249 | 8.34 | 34.14 | 1.22 | 148 | 200 | 8.38 | 34.09 | 1.59 | 26.52 | 152 | 0.42 |
| 297 | 8.05 | 34.16 | 1.10 | 142 | 250 | 8.33 | 34.14 | 1.23 | 26.57 | 147 | 0.49 |
| 355 | 7.70 | 34.22 | 0.97 | 133 | 300 | 8.04 | 34.16 | 1.09 | 26.63 | 142 | 0.57 |
| 404 | 7.13 | 34.20 | 0.84 | 126 | 400 | 7.20 | 34.20 | 0.85 | 26.78 | 127 | 0.71 |
| **77.65** | PAOLINA-T; September 12, 1952; 0620 GCT; 34°30.5'N, 121°52.5'W; sounding, 2060 fm; wind, 300°, force 7; weather, partly cloudy; sea, rough; wire angle, 38°. | | | | | | | | | | |
| 0 | 15.92 | 32.97 | 5.79 | 370 | 0 | 15.92 | 32.97 | 5.79 | 24.23 | 370 | 0.00 |
| 8 | 15.94 | 32.99 | 5.82 | 369 | 10 | 15.94 | 32.99 | 5.83 | 24.24 | 369 | 0.04 |
| 16 | 15.80 | 32.94 | 5.93 | 370 | 20 | 15.70 | 32.96 | 5.98 | 24.27 | 366 | 0.07 |
| 29 | 15.16 | 33.13 | 6.03 | 343 | 30 | 15.15 | 33.13 | 6.05 | 24.52 | 342 | 0.11 |
| 46 | 12.28 | 32.84 | 6.38 | 308 | 50 | 11.57 | 32.83 | 6.32 | 25.01 | 296 | 0.17 |
| 56 | 11.18 | 32.81 | 5.95 | 291 | 75 | 10.23 | 32.77 | 5.60 | 25.20 | 278 | 0.25 |
| 69 | 10.64 | 32.74 | 5.70 | 287 | 100 | 9.65 | 33.35 | 4.84 | 25.74 | 226 | 0.31 |
| 88 | 9.83 | 33.17 | 5.29 | 242 | 150 | 8.93 | 33.73 | 3.22 | 26.16 | 187 | 0.41 |
| 128 | 9.28 | 33.62 | 3.86 | 200 | 200 | 8.02 | 33.85 | 2.79 | 26.39 | 165 | 0.50 |
| 165 | 8.66 | 33.78 | 2.97 | 179 | 250 | 7.38 | 34.07 | 2.38 | 26.65 | 139 | 0.58 |
| 206 | 7.92 | 33.87 | 2.76 | 162 | 300 | 7.02 | 34.09 | 1.57 | 26.72 | 133 | 0.65 |
| 239 | 7.48 | 34.05 | 2.50 | 142 | 400 | 6.17 | 34.13 | | 26.87 | 119 | 0.78 |
| 325 | 6.82 | 34.09 | 1.23 | 131 | | | | | | | |
| 412 | 6.06 | 34.14 | - | 117 | | | | | | | |
| **80.51** | PAOLINA-T; September 10, 1952; 0005 GCT; 34°26'N, 120°33'W; sounding, 70 fm; wind, 300°, force 5; weather, partly cloudy; sea, moderate; wire angle, 08°. | | | | | | | | | | |
| 0 | 11.24 | 33.57 | 4.83 | 236 | 0 | 11.24 | 33.57 | 4.83 | 25.64 | 236 | 0.00 |
| 10 | 10.65 | 33.60 | 4.36 | 224 | 10 | 10.65 | 33.60 | 4.36 | 25.77 | 224 | 0.02 |
| 20 | 10.41 | 33.60 | 4.09 | 220 | 20 | 10.41 | 33.60 | 4.09 | 25.81 | 220 | 0.05 |
| 30 | 10.42 | 33.62 | 4.05 | 218 | 30 | 10.42 | 33.62 | 4.05 | 25.82 | 218 | 0.07 |
| 50 | 10.16 | 33.62 | 3.59 | 214 | 50 | 10.16 | 33.62 | 3.59 | 25.87 | 214 | 0.11 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PAOLINA-T; September 10, 1952; 0403 GCT; 34°18'N, 120°50'W; sounding, 440 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°. | | | | | | | | | | | 80.55 |
| 0 | 12.24 | 33.48 | 5.63 | 260 | 0 | 12.24 | 33.48 | 5.63 | 25.38 | 260 | 0.00 |
| 10 | 12.25 | 33.49 | 5.48 | 260 | 10 | 12.25 | 33.49 | 5.48 | 25.39 | 260 | 0.03 |
| 20 | 12.19 | 33.49 | 5.39 | 258 | 20 | 12.19 | 33.49 | 5.39 | 25.40 | 258 | 0.05 |
| 34 | 11.80 | 33.51 | 5.11 | 250 | 30 | 11.98 | 33.50 | 5.24 | 25.45 | 254 | 0.08 |
| 53 | 9,88 | 33.68 | 3.25 | 205 | 50 | 10.20 | 33.64 | 3.43 | 25.88 | 213 | 0.12 |
| 66 | 9.52 | 33.75 | 2.94 | 194 | 75 | 9.49 | 33.76 | 2.89 | 26.09 | 193 | 0.18 |
| 80 | 9.48 | 33.77 | 2.88 | 192 | 100 | 9.32 | 33.82 | 2.72 | 26.16 | 186 | 0.22 |
| 102 | 9.30 | 33.82 | 2.70 | 186 | 150 | 9.14 | 33.96 | 2.02 | 26.30 | 173 | 0.31 |
| 152 | 9.12 | 33.96 | 2.00 | 173 | 200 | 8.82 | 34.08 | 1.71 | 26.45 | 159 | 0.40 |
| 203 | 8.80 | 34.09 | 1.68 | 158 | 250 | 8.51 | 34.19 | 1.53 | 26.58 | 146 | 0.48 |
| 257 | 8.47 | 34.20 | 1.51 | 145 | 300 | 8.20 | 34.23 | 1.12 | 26.66 | 139 | 0.55 |
| 303 | 8.16 | 34.23 | 1.09 | 138 | 400 | 7.26 | 34.23 | 0.74 | 26.80 | 126 | 0.69 |
| 410 | 7.17 | 34.23 | 0.71 | 125 | 500 | 6.49 | 34.23 | 0.63 | 26.90 | 116 | 0.82 |
| 515 | 6.38 | 34.23 | 0.61 | 115 | 600 | 5.78 | 34.26 | 0.39 | 27.02 | 105 | 0.93 |
| 621 | 5.64 | 34.27 | 0.37 | 103 | | | | | | | |
| PAOLINA-T; September 10, 1952; 0727, 0810 GCT; 34°07'N, 121°12'W; sounding, 1410 fm; wind, 310°, force 4; weather, clear; sea, missing; wire angle, 20°, 25°. | | | | | | | | | | | 80.60 |
| 0 | 13.30 | 33.39 | 6.20 | 286 | 0 | 13.30 | 33.39 | 6.20 | 25.11 | 286 | 0.00 |
| 9 | 13.32 | 33.39 | 6.62 | 287 | 10 | 13.32 | 33.39 | 6.62 | 25.10 | 287 | 0.03 |
| 28 | 13.28 | 33.40 | 6.18 | 285 | 20 | 13.30 | 33.39 | 6.53 | 25.11 | 286 | 0.06 |
| 56 | 10.38 | 33.28 | 4.83 | 243 | 30 | 13.27 | 33.40 | 6.00 | 25.12 | 285 | 0.09 |
| 85 | 9.45 | 33.60 | 3.44 | 204 | 50 | 10.93 | 33.29 | 5.04 | 25.48 | 251 | 0.14 |
| 112 | 8.84 | 33.75 | 3.07 | 184 | 75 | 9.77 | 33.47 | 3.90 | 25.82 | 219 | 0.20 |
| 169 | 8.41 | 33.91 | 2.63 | 166 | 100 | 9.04 | 33.69 | 3.21 | 26.11 | 191 | 0.25 |
| 223 | 7.65 | 34.00 | 2.09 | 148 | 150 | 8.59 | 33.86 | 2.76 | 26.31 | 172 | 0.34 |
| 331 | 6.78 | 34.09 | 1.38 | 130 | 200 | 7.97 | 33.98 | 2.33 | 26.50 | 154 | 0.43 |
| 435 | 6.30 | 34.27 | 0.61 | 111 | 250 | 7.38 | 34.01 | 1.89 | 26.61 | 144 | 0.50 |
| | | | | | 300 | 6.97 | 34.05 | 1.62 | 26.70 | 135 | 0.57 |
| 546 | 5.84 | 34.31 | 0.44 | 102 | 400 | 6.44 | 34.23 | 0.74 | 26.91 | 115 | 0.70 |
| 652 | 5.40 | 34.38 | 0.35 | 92 | 500 | 6.03 | 34.29 | 0.50 | 27.01 | 106 | 0.82 |
| 873 | 4.38 | 34.43 | 0.48 | 77 | 600 | 5.63 | 34.35 | 0.39 | 27.11 | 97 | 0.93 |
| 1094 | 3.66 | 34.49 | 0.68 | 65 | 700 | 5.18 | 34.39 | 0.37 | 27.19 | 88 | 1.03 |
| 1308 | 3.18 | 34.51 | 0.92 | 59 | 800 | 4.70 | 34.41 | 0.42 | 27.26 | 82 | 1.12 |
| | | | | | 1000 | 3.93 | 34.47 | 0.60 | 27.39 | 69 | 1.29 |
| PAOLINA-T; September 10, 1952; 1452 GCT; 33°45'N, 121°55.5'W; sounding, 2150 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 14°. | | | | | | | | | | | 80.70 |
| 0 | 16.24 | 32.95 | 6.12 | 379 | 0 | 16.24 | 32.95 | 6.12 | 24.14 | 379 | 0.00 |
| 10 | 16.26 | 32.95 | 5.60 | 379 | 10 | 16.26 | 32.95 | 5.60 | 24.13 | 379 | 0.04 |
| 20 | 16.27 | 32.97 | 5.79 | 378 | 20 | 16.27 | 32.97 | 5.79 | 24.15 | 378 | 0.08 |
| 34 | 16.18 | 32.99 | 5.73 | 374 | 30 | 16.22 | 32.99 | 5.75 | 24.17 | 375 | 0.11 |
| 48 | 15.50 | 32.97 | 6.36 | 361 | 50 | 15.25 | 32.97 | 6.43 | 24.38 | 356 | 0.19 |
| 63 | 13.34 | 32.94 | 6.55 | 320 | 75 | 12.00 | 32.84 | 6.49 | 24.93 | 303 | 0.27 |
| 78 | 11.68 | 32.83 | 6.45 | 298 | 100 | 10.09 | 32.85 | 5.48 | 25.28 | 270 | 0.34 |
| 96 | 10.22 | 32.84 | 5.66 | 273 | 150 | 8.88 | 33.58 | 3.85 | 26.05 | 197 | 0.46 |
| 148 | 8.94 | 33.57 | 3.90 | 199 | 200 | 8.13 | 33.89 | 3.29 | 26.40 | 163 | 0.55 |
| 196 | 8.15 | 33.87 | 3.37 | 165 | 250 | 7.60 | 34.01 | 2.43 | 26.58 | 147 | 0.63 |
| 244 | 7.71 | 34.00 | 2.51 | 149 | 300 | 6.87 | 34.06 | 1.91 | 26.72 | 133 | 0.70 |
| 291 | 6.95 | 34.05 | 2.00 | 135 | 400 | 6.11 | 34.14 | 1.04 | 26.88 | 118 | 0.83 |
| 392 | 6.14 | 34.13 | 1.08 | 119 | 500 | 5.60 | 34.24 | 0.51 | 27.02 | 104 | 0.95 |
| 490 | 5.64 | 34.23 | 0.53 | 106 | 600 | (5.10) | (34.31) | (0.36) | (27.14) | (94) | (1.06) |
| 594 | 5.12 | 34.31 | 0.38 | 94 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

80.80 PAOLINA-T; September 10, 1952; 2119 GCT; 33°24'N, 122°37.5'W; sounding, 2000 fm; wind, 300°, force 5; weather, partly cloudy; sea, rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.75 | 33.13 | 5.42 | 399 | 0 | 17.75 | 33.13 | 5.42 | 23.92 | 399 | 0.00 |
| 9 | 17.74 | 33.13 | 5.47 | 399 | 10 | 17.74 | 33.13 | 5.45 | 23.93 | 399 | 0.04 |
| 24 | 17.70 | 33.12 | 5.43 | 399 | 20 | 17.71 | 33.13 | 5.44 | 23.93 | 398 | 0.08 |
| 48 | 17.01 | 33.08 | 5.61 | 386 | 30 | 17.68 | 33.11 | 5.45 | 23.92 | 399 | 0.12 |
| 71 | 13.13 | 32.94 | 6.25 | 316 | 50 | 16.80 | 33.08 | 5.65 | 24.11 | 381 | 0.20 |
| 95 | 11.36 | 32.88 | 5.97 | 289 | 75 | 12.82 | 32.91 | 6.23 | 24.83 | 313 | 0.29 |
| 145 | 9.10 | 33.44 | 4.49 | 211 | 100 | 11.18 | 32.89 | 5.83 | 25.12 | 285 | 0.36 |
| 190 | 8.31 | 33.82 | 3.37 | 171 | 150 | 9.00 | 33.50 | 4.35 | 25.97 | 205 | 0.48 |
| 282 | 7.56 | 34.05 | 1.90 | 143 | 200 | 8.24 | 33.86 | 3.14 | 26.36 | 167 | 0.58 |
| 380 | 6.64 | 34.13 | 1.12 | 125 | 250 | 7.83 | 34.00 | 2.30 | 26.54 | 151 | 0.66 |
| 472 | 5.95 | 34.07 | 0.79 | 121 | 300 | 7.38 | 34.07 | 1.73 | 26.65 | 139 | 0.73 |
| 569 | 5.31 | 34.16 | 0.57 | 107 | 400 | 6.50 | 34.11 | 1.03 | 26.81 | 125 | 0.87 |
| 762 | 4.54 | 34.31 | 0.36 | 88 | 500 | 5.76 | 34.09 | 0.73 | 26.89 | 118 | 1.00 |
| 952 | 4.00 | 34.42 | 0.48 | 74 | 600 | 5.17 | 34.19 | 0.50 | 27.04 | 103 | 1.12 |
| 1153 | 3.52 | 34.45 | 0.73 | 67 | 700 | 4.77 | 34.27 | 0.38 | 27.14 | 93 | 1.22 |
| | | | | | 800 | 4.43 | 34.34 | 0.38 | 27.24 | 84 | 1.32 |
| | | | | | 1000 | 3.89 | 34.43 | 0.52 | 27.37 | 72 | 1.49 |

80.90 PAOLINA-T; September 11, 1952; 0303, 0332 GCT; 33°09'N, 123°13'W; sounding, 2400 fm; wind, 320°, force 4; weather, cloudy; sea, missing; wire angle, 25°, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.74 | 33.01 | 5.56 | 408 | 0 | 17.74 | 33.01 | 5.56 | 23.83 | 408 | 0.00 |
| 10 | 17.76 | 33.03 | 5.51 | 407 | 10 | 17.76 | 33.03 | 5.51 | 23.84 | 407 | 0.04 |
| 19 | 17.76 | 32.95 | 5.48 | 413 | 20 | 17.76 | 32.95 | 5.48 | 23.78 | 413 | 0.08 |
| 32 | 17.66 | 32.94 | 5.50 | 411 | 30 | 17.71 | 32.94 | 5.49 | 23.79 | 412 | 0.12 |
| 50 | 16.22 | 32.84 | 5.68 | 386 | 50 | 16.22 | 32.84 | 5.68 | 24.06 | 386 | 0.20 |
| 64 | 13.54 | 32.90 | 6.21 | 327 | 75 | 12.75 | 32.87 | 6.21 | 24.81 | 314 | 0.29 |
| 78 | 12.64 | 32.86 | 6.21 | 313 | 100 | 11.71 | 32.90 | 6.07 | 25.03 | 293 | 0.37 |
| 100 | 11.71 | 32.90 | 6.07 | 293 | 150 | 9.43 | 33.39 | 3.82 | 25.81 | 220 | 0.50 |
| 148 | 9.46 | 33.37 | 3.84 | 221 | 200 | 8.43 | 33.73 | 3.59 | 26.23 | 179 | 0.60 |
| 196 | 8.50 | 33.71 | 3.61 | 182 | 250 | 7.62 | 33.91 | 3.03 | 26.49 | 155 | 0.68 |
| | | | | | 300 | 7.29 | 33.99 | 2.21 | 26.60 | 144 | 0.76 |
| 249 | 7.64 | 33.91 | 3.02 | 155 | 400 | 6.62 | 34.07 | 1.07 | 26.76 | 129 | 0.90 |
| 294 | 7.32 | 33.98 | 2.30 | 145 | 500 | 5.93 | 34.16 | 0.64 | 26.92 | 114 | 1.03 |
| 400 | 6.62 | 34.07 | 1.07 | 129 | 600 | 5.11 | | 0.47 | | | |
| 503 | 5.88 | 34.16 | 0.62 | 114 | | | | | | | |
| 609 | 5.05 | - | 0.46 | | | | | | | | |

80.100 PAOLINA-T; September 11, 1952; 0953 GCT; 32°49'N, 123°51.5'W; sounding, 2400 fm; wind, 310°, force 3; weather, partly cloudy; sea, missing; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.90 | 33.19 | | 398 | 0 | 17.90 | 33.19 | | 23.93 | 398 | 0.00 |
| 10 | 17.92 | 33.17 | | 400 | 10 | 17.92 | 33.17 | | 23.91 | 400 | 0.04 |
| 30 | 17.94 | 33.15 | | 402 | 20 | 17.93 | 33.16 | | 23.90 | 401 | 0.08 |
| 59 | 15.47 | 33.12 | | 350 | 30 | 17.94 | 33.15 | | 23.89 | 402 | 0.12 |
| 88 | 12.84 | 33.01 | | 306 | 50 | 16.81 | 33.13 | | 24.15 | 378 | 0.20 |
| 116 | 11.09 | 33.04 | | 272 | 75 | 13.78 | 33.06 | | 24.76 | 320 | 0.29 |
| 174 | 9.22 | 33.42 | | 214 | 100 | 11.94 | 33.01 | | 25.08 | 289 | 0.36 |
| 232 | 8.47 | 33.86 | | 170 | 150 | 9.83 | 33.23 | | 25.62 | 238 | 0.50 |
| 347 | 6.68 | 33.98 | | 137 | 200 | 8.91 | 33.64 | | 26.09 | 193 | 0.61 |
| 458 | 5.75 | 34.07 | | 119 | 250 | 8.15 | 33.90 | | 26.41 | 163 | 0.70 |
| 574 | 5.04 | 34.13 | | 106 | 300 | 7.31 | 33.95 | | 26.57 | 147 | 0.78 |
| 687 | 4.62 | 34.23 | | 94 | 400 | 6.20 | 34.03 | | 26.78 | 127 | 0.92 |
| 916 | 4.01 | 34.36 | | 78 | 500 | 5.48 | 34.10 | | 26.93 | 114 | 1.04 |
| 1140 | 3.50 | 34.34 | | 75 | 600 | 4.94 | 34.15 | | 27.03 | 104 | 1.16 |
| 1355 | 3.02 | 34.49 | | 59 | 700 | 4.60 | 34.24 | | 27.14 | 93 | 1.26 |
| | | | | | 800 | 4.33 | 34.32 | | 27.23 | 85 | 1.36 |
| | | | | | 1000 | 3.83 | 34.35 | | 27.31 | 77 | 1.54 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| PAOLINA-T; September 8, 1952; 2013 GCT; 34°00.5'N, 119°02'W; sounding, 45 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 10°. | | | | | | | | | | | 85.38 |
| 0 | 14.36 | 33.31 | 6.20 | 313 | 0 | 14.36 | 33.31 | 6.20 | 24.83 | 313 | 0.00 |
| 10 | 13.83 | 33.28 | 6.20 | 305 | 10 | 13.83 | 33.28 | 6.20 | 24.91 | 305 | 0.03 |
| 20 | 12.98 | 33.28 | 5.58 | 288 | 20 | 12.98 | 33.28 | 5.58 | 25.09 | 288 | 0.06 |
| 30 | 12.10 | 33.28 | 5.39 | 272 | 30 | 12.10 | 33.28 | 5.39 | 25.26 | 272 | 0.09 |
| 50 | 10.44 | 33.31 | 4.26 | 242 | 50 | 10.44 | 33.31 | 4.26 | 25.58 | 242 | 0.14 |
| PAOLINA-T; September 8, 1952; 1825 GCT; 33°56'N, 119°09.5'W; sounding, 450 fm; wind, 320°, force 4; weather, clear; sea, missing; wire angle, 29°. | | | | | | | | | | | 85.40 |
| 0 | 18.06 | 33.40 | 5.90 | 387 | 0 | 18.06 | 33.40 | 5.90 | 24.05 | 387 | 0.00 |
| 9 | 18.04 | 33.25 | 5.86 | 397 | 10 | 18.03 | 33.25 | 5.86 | 23.95 | 397 | 0.04 |
| 18 | 17.02 | 33.35 | 6.24 | 367 | 20 | 16.60 | 33.35 | 6.31 | 24.36 | 357 | 0.08 |
| 31 | 14.07 | 33.35 | 6.34 | 304 | 30 | 14.24 | 33.35 | 6.34 | 24.88 | 308 | 0.11 |
| 48 | 12.12 | 33.31 | 5.74 | 270 | 50 | 11.80 | 33.31 | 5.68 | 25.34 | 265 | 0.17 |
| 61 | 10.82 | 33.35 | 5.45 | 245 | 75 | 10.25 | 33.40 | 4.00 | 25.68 | 232 | 0.23 |
| 72 | 10.33 | 33.39 | 4.15 | 234 | 100 | 9.60 | 33.64 | 3.09 | 25.98 | 204 | 0.29 |
| 94 | 9.65 | 33.58 | 3.24 | 209 | 150 | 9.26 | 33.97 | 2.31 | 26.29 | 174 | 0.38 |
| 135 | 9.32 | 33.87 | 2.45 | 182 | 200 | 8.90 | 34.10 | 1.96 | 26.45 | 159 | 0.47 |
| 180 | 9.08 | 34.09 | 2.09 | 162 | 250 | 8.72 | 34.13 | 1.60 | 26.50 | 154 | 0.55 |
| 228 | 8.78 | 34.11 | 1.77 | 156 | 300 | 8.40 | 34.19 | 1.25 | 26.60 | 145 | 0.62 |
| 269 | 8.64 | 34.16 | 1.48 | 151 | 400 | 7.57 | 34.22 | 0.72 | 26.75 | 131 | 0.77 |
| 366 | 7.86 | 34.22 | 0.84 | 135 | 500 | 6.72 | 34.22 | 0.50 | 26.86 | 120 | 0.90 |
| 463 | 7.04 | 34.22 | 0.59 | 124 | | | | | | | |
| 566 | 6.14 | 34.23 | 0.36 | 112 | | | | | | | |
| PAOLINA-T; September 8, 1952; 1200 GCT; 33°37'N, 119°52'W; sounding, 150 fm; wind, 310°, force 5; weather, clear; sea, missing; wire angle, 19°. | | | | | | | | | | | 85.50 |
| 0 | 15.86 | 33.35 | 5.95 | 341 | 0 | 15.86 | 33.35 | 5.95 | 24.53 | 341 | 0.00 |
| 9 | 15.88 | 33.33 | 6.01 | 343 | 10 | 15.88 | 33.33 | 6.02 | 24.51 | 343 | 0.03 |
| 24 | 14.98 | 33.40 | 6.12 | 319 | 20 | 15.40 | 33.36 | 6.09 | 24.64 | 331 | 0.07 |
| 48 | 9.78 | 33.55 | 3.59 | 213 | 30 | 12.70 | 33.45 | 6.02 | 25.27 | 271 | 0.10 |
| 71 | 9.56 | 33.73 | 3.59 | 196 | 50 | 9.71 | 33.57 | 3.59 | 25.91 | 211 | 0.15 |
| 95 | 9.13 | 33.78 | 2.52 | 186 | 75 | 9.46 | 33.74 | 3.57 | 26.08 | 194 | 0.20 |
| 118 | 8.97 | - | 2.84 | | 100 | 9.07 | (33.79) | 2.54 | (26.18) | (184) | (0.25) |
| 148 | 8.92 | - | 2.35 | | 150 | (8.92) | | (2.32) | | | |
| PAOLINA-T; September 8, 1952; 0405 GCT; 33°19'N, 120°33.5'W; sounding, 450 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 28°. | | | | | | | | | | | 85.60 |
| 0 | 16.63 | 33.31 | 5.75 | 361 | 0 | 16.63 | 33.31 | 5.75 | 24.33 | 361 | 0.00 |
| 9 | 16.64 | 33.31 | 5.71 | 361 | 10 | 16.64 | 33.31 | 5.72 | 24.32 | 361 | 0.04 |
| 18 | 15.92 | 33.30 | 5.77 | 346 | 20 | 15.75 | 33.30 | 5.76 | 24.52 | 343 | 0.07 |
| 31 | 15.04 | 33.46 | 5.56 | 316 | 30 | 15.19 | 33.46 | 5.56 | 24.76 | 319 | 0.10 |
| 49 | 13.74 | 33.46 | 5.43 | 290 | 50 | 13.50 | 33.46 | 5.42 | 25.12 | 285 | 0.17 |
| 62 | 10.85 | 33.46 | 4.07 | 237 | 75 | 10.00 | 33.49 | 3.63 | 25.79 | 221 | 0.23 |
| 74 | 10.00 | 33.49 | 3.64 | 221 | 100 | 9.11 | 33.70 | 2.87 | 26.10 | 192 | 0.28 |
| 96 | 9.19 | 33.68 | 2.94 | 194 | 150 | 8.37 | 33.91 | 2.28 | 26.38 | 165 | 0.37 |
| 142 | 8.44 | 33.89 | 2.37 | 168 | 200 | 7.86 | 34.00 | 1.70 | 26.53 | 151 | 0.45 |
| 189 | 7.99 | 33.98 | 1.80 | 155 | 250 | 7.36 | 34.07 | 1.44 | 26.66 | 139 | 0.53 |
| 240 | 7.44 | 34.05a) | 1.49 | 142 | 300 | 7.06 | 34.18 | 1.26 | 26.79 | 127 | 0.59 |
| 284 | 7.12 | 34.16a) | 1.31 | 129 | 400 | 6.57 | 34.25 | 0.50 | 26.91 | 115 | 0.72 |
| 385 | 6.67 | 34.25 | 0.53 | 117 | 500 | 5.99 | 34.20 | 0.41 | 26.94 | 112 | 0.84 |
| 486 | 6.07 | 34.20 | 0.42 | 113 | 600 | (5.53) | (34.25) | (0.32) | (27.04) | (103) | (0.96) |
| 593 | 5.55 | 34.25 | 0.32 | 103 | | | | | | | |

a) Salinity samples at 240 and 284 meters appear to have been reversed; they are assumed to be listed in correct order.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **90.28** | PAOLINA-T; September 6, 1952; 0500 GCT; 33°28'N, 117°47'W; sounding, 280 fm; wind, 250°, force 1; weather, cloudy; sea, missing; wire angle, 12°. | | | | | | | | | | |
| 0 | 17.76 | 33.31 | 6.27 | 386 | 0 | 17.76 | 33.31 | 6.27 | 24.06 | 386 | 0.00 |
| 11 | 14.30 | 33.26 | 6.82 | 316 | 10 | 14.50 | 33.26 | 6.82 | 24.76 | 320 | 0.04 |
| 26 | 11.70 | 33.12 | 5.56 | 277 | 20 | 12.14 | 33.16 | 6.78 | 25.16 | 282 | 0.07 |
| 64 | 10.21 | 33.37 | 4.02 | 233 | 30 | 11.47 | 33.12 | 6.18 | 25.25 | 273 | 0.09 |
| 93 | 9.95 | 33.66 | 3.07 | 208 | 50 | 10.60 | 33.24 | 4.65 | 25.50 | 249 | 0.15 |
| 123 | 9.84 | 33.69 | 2.81 | 204 | 75 | 10.08 | 33.50 | 3.60 | 25.79 | 222 | 0.20 |
| 192 | 9.46 | 34.20 | 1.65 | 160 | 100 | 9.93 | 33.67 | 3.01 | 25.95 | 207 | 0.26 |
| 267 | 8.99 | 34.16 | 1.49 | 156 | 150 | 9.70 | 33.97 | 2.50 | 26.22 | 181 | 0.36 |
| 343 | 8.22 | 34.18 | 1.04 | 143 | 200 | 9.41 | 34.20 | 1.62 | 26.45 | 159 | 0.44 |
| 408 | 7.76 | 34.22 | 0.79 | 133 | 250 | 9.12 | 34.17 | 1.53 | 26.47 | 157 | 0.52 |
| | | | | | 300 | 8.66 | 34.16 | 1.37 | 26.53 | 151 | 0.60 |
| | | | | | 400 | 7.80 | 34.21 | 0.79 | 26.70 | 135 | 0.75 |
| **90.30** | PAOLINA-T; September 6, 1952; 0742 GCT; 33°24.5'N, 117°55.5'W; sounding, 320 fm; wind, 300°, force 3; weather, cloudy; sea, missing; wire angle, 12°. | | | | | | | | | | |
| 0 | 18.86 | 33.28 | 6.61 | 414 | 0 | 18.86 | 33.28 | 6.61 | 23.76 | 414 | 0.00 |
| 10 | 18.09 | 33.30 | 6.20 | 395 | 10 | 18.09 | 33.30 | 6.20 | 23.97 | 395 | 0.04 |
| 25 | 14.85 | 33.24 | 6.58 | 328 | 20 | 15.70 | 33.25 | 6.55 | 24.49 | 345 | 0.08 |
| 49 | 11.54 | 33.24 | 5.43 | 265 | 30 | 14.13 | 33.24 | 6.52 | 24.82 | 314 | 0.11 |
| 72 | 9.96 | 33.26 | 4.80 | 237 | 50 | 11.49 | 33.24 | 5.36 | 25.34 | 264 | 0.17 |
| 96 | 9.28 | 33.53 | 4.36 | 207 | 75 | 9.90 | 33.26 | 4.77 | 25.63 | 237 | 0.23 |
| 150 | 9.45 | 33.95 | 2.44 | 178 | 100 | 9.29 | 33.60 | 4.25 | 26.00 | 202 | 0.29 |
| 197 | 9.36 | 34.11 | 1.88 | 165 | 150 | 9.45 | 33.95 | 2.44 | 26.24 | 178 | 0.38 |
| 245 | 8.04 | 33.95 | 2.51 | 157 | 200 | 9.33 | 34.11 | 1.88 | 26.39 | 165 | 0.47 |
| 294 | 8.32 | 34.16 | 1.22 | 146 | 250 | 8.05 | 33.95 | 2.50 | 26.46 | 158 | 0.55 |
| 347 | 7.88 | 34.25 | 0.96 | 133 | 300 | 8.30 | 34.18 | 1.17 | 26.61 | 144 | 0.63 |
| 397 | 7.47 | 34.23 | 0.74 | 129 | 400 | 7.44 | 34.22 | 0.73 | 26.76 | 129 | 0.77 |
| 446 | 7.11 | 34.16 | 0.71 | 129 | 500 | (6.72) | (34.25) | (0.51) | (26.89) | (117) | (0.90) |
| 496 | 6.76 | 34.25 | 0.51 | 118 | | | | | | | |
| **90.37** | PAOLINA-T; September 6, 1952; 1235 GCT; 33°09.5'N, 118°22.5'W; sounding, 240 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | 21.14 | 33.57 | 5.15 | 450 | 0 | 21.14 | 33.57 | 5.15 | 23.39 | 450 | 0.00 |
| 10 | 20.82 | 33.60 | 5.31 | 440 | 10 | 20.82 | 33.60 | 5.31 | 23.50 | 440 | 0.04 |
| 25 | 11.92 | 33.46 | 5.77 | 256 | 20 | 16.40 | 33.50 | 5.72 | 24.52 | 342 | 0.08 |
| 50 | 9.94 | 33.57 | - | 214 | 30 | 11.09 | 33.46 | 5.72 | 25.58 | 241 | 0.11 |
| 74 | 9.64 | 33.73 | 3.10 | 198 | 50 | 9.94 | 33.57 | | 25.87 | 214 | 0.16 |
| 99 | 9.40 | 33.91 | 2.85 | 181 | 75 | 9.63 | 33.74 | 3.10 | 26.05 | 197 | 0.21 |
| 152 | 9.24 | 34.13 | 1.95 | 162 | 100 | 9.39 | 33.91 | 2.82 | 26.22 | 180 | 0.26 |
| 202 | 8.82 | 34.20 | 1.79 | 150 | 150 | 9.25 | 34.12 | 1.96 | 26.41 | 163 | 0.34 |
| 251 | 8.84 | 34.27 | 1.27 | 145 | 200 | 8.82 | 34.20 | 1.80 | 26.54 | 150 | 0.42 |
| 300 | 8.41 | 34.25 | 1.12 | 140 | 250 | 8.84 | 34.27 | 1.26 | 26.59 | 145 | 0.50 |
| 355 | 7.93 | 34.25 | 0.87 | 134 | 300 | 8.41 | 34.25 | 1.12 | 26.64 | 140 | 0.57 |
| **90.45** | PAOLINA-T; September 6, 1952; 1825 GCT; 32°54'N, 119°01'W; sounding, 950 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | 18.99 | 33.42 | 5.37 | 407 | 0 | 18.99 | 33.42 | 5.37 | 23.84 | 407 | 0.00 |
| 10 | 18.98 | 33.46 | 5.42 | 404 | 10 | 18.98 | 33.46 | 5.42 | 23.87 | 404 | 0.04 |
| 20 | 18.44 | 33.46 | 5.56 | 391 | 20 | 18.44 | 33.46 | 5.56 | 24.01 | 391 | 0.08 |
| 34 | 11.98 | 33.31 | 5.37 | 268 | 30 | 13.00 | 33.35 | 5.50 | 25.14 | 284 | 0.11 |
| 49 | 10.92 | 33.31 | 4.80 | 250 | 50 | 10.85 | 33.31 | 4.78 | 25.51 | 248 | 0.17 |
| 63 | 10.08 | 33.35 | 4.35 | 233 | 75 | 9.65 | 33.45 | 4.00 | 25.82 | 219 | 0.23 |
| 78 | 9.53 | 33.48 | 3.97 | 214 | 100 | 9.09 | 33.69 | 3.59 | 26.10 | 192 | 0.28 |
| 96 | 9.11 | 33.66 | 3.65 | 195 | 150 | 8.88 | 34.02 | 2.52 | 26.39 | 164 | 0.37 |
| 149 | 8.88 | 34.02 | 2.52 | 164 | 200 | 8.60 | 34.15 | 1.73 | 26.54 | 151 | 0.45 |
| 196 | 8.64 | 34.14 | 1.77 | 152 | 250 | 8.00 | 34.21 | 1.31 | 26.67 | 138 | 0.52 |
| 244 | 8.07 | 34.20 | 1.38 | 139 | 300 | 7.42 | 34.25 | 0.83 | 26.79 | 127 | 0.59 |
| 292 | 7.48 | 34.24 | 0.86 | 128 | 400 | 6.82 | 34.29 | 0.54 | 26.91 | 116 | 0.72 |
| 395 | 6.85 | 34.29 | 0.56 | 116 | 500 | 6.40 | 34.31 | 0.34 | 26.98 | 109 | 0.84 |
| 493 | 6.44 | 34.31 | 0.34 | 109 | 600 | (5.84) | (34.31) | (0.27) | (27.05) | (102) | (0.95) |
| 598 | 5.86 | 34.31 | 0.28 | 102 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PAOLINA-T; September 6, 1952; 2357 GCT; 32°38.5'N, 119°29'W; sounding, 800 fm; wind, 300°, force 6; weather, clear; sea, missing; wire angle, 24°. | | | | | | | | | | | 90.53 |
| 0 | 18.08 | 33.44 | | 384 | 0 | 18.08 | 33.44 | | 24.08 | 384 | 0.00 |
| 9 | 18.09 | 33.46 | | 383 | 10 | 18.07 | 33.46 | | 24.10 | 383 | 0.04 |
| 28 | 12.34 | 33.21 | | 282 | 20 | 18.07 | 33.40 | | 24.05 | 387 | 0.08 |
| 55 | 9.86 | 33.45 | | 222 | 30 | 12.25 | 33.21 | | 25.17 | 280 | 0.11 |
| 82 | 9.33 | 33.58 | | 204 | 50 | 10.00 | 33.42 | | 25.74 | 226 | 0.16 |
| 107 | 9.14 | 33.77 | | 187 | 75 | 9.42 | 33.54 | | 25.93 | 208 | 0.22 |
| 159 | 8.22 | 33.96 | | 159 | 100 | 9.21 | 33.72 | | 26.10 | 192 | 0.27 |
| 211 | 8.02 | 34.11 | | 145 | 150 | 8.29 | 33.92 | | 26.40 | 163 | 0.36 |
| 316 | 7.54 | 34.23 | | 130 | 200 | 8.07 | 34.09 | | 26.57 | 147 | 0.44 |
| 417 | 6.78 | 34.31 | | 114 | 250 | 7.86 | 34.16 | | 26.66 | 139 | 0.51 |
| 522 | 6.13 | 34.29 | | 107 | 300 | 7.63 | 34.22 | | 26.74 | 132 | 0.58 |
| 626 | 5.50 | 34.37 | | 94 | 400 | 6.89 | 34.30 | | 26.90 | 116 | 0.71 |
| 839 | 4.52 | 34.51 | | 72 | 500 | 6.27 | 34.30 | | 26.99 | 108 | 0.83 |
| 1051 | 3.98 | 34.51 | | 67 | 600 | 5.65 | 34.35 | | 27.10 | 97 | 0.94 |
| 1263 | 3.88 | - | | | 700 | 5.12 | 34.44 | | 27.24 | 84 | 1.03 |
| | | | | | 800 | 4.66 | 34.50 | | 27.34 | 75 | 1.12 |
| | | | | | 1000 | 4.06 | 34.51 | | 27.41 | 68 | 1.28 |
| PAOLINA-T; September 7, 1952; 0605 GCT; 32°23'N, 119°57'W; sounding, 550 fm; wind, 310°, force 5; weather, partly cloudy; sea, missing; wire angle, 22°. | | | | | | | | | | | 90.60 |
| 0 | 16.44 | 33.30 | | 357 | 0 | 16.44 | 33.30 | | 24.36 | 357 | 0.00 |
| 9 | 16.46 | 33.28 | | 359 | 10 | 16.46 | 33.28 | | 24.34 | 359 | 0.04 |
| 19 | 16.40 | 33.24 | | 361 | 20 | 16.40 | 33.24 | | 24.32 | 361 | 0.07 |
| 33 | 14.62 | 33.19 | | 327 | 30 | 15.00 | 33.20 | | 24.61 | 334 | 0.11 |
| 51 | 12.36 | 33.04 | | 295 | 50 | 12.60 | 33.06 | | 24.99 | 298 | 0.17 |
| 65 | 10.84 | 32.90 | | 278 | 75 | 10.15 | 32.96 | | 25.36 | 263 | 0.24 |
| 78 | 10.06 | 32.97 | | 261 | 100 | 9.44 | 33.46 | | 25.86 | 215 | 0.30 |
| 100 | 9.44 | 33.46 | | 215 | 150 | 8.65 | 33.81 | | 26.26 | 177 | 0.40 |
| 149 | 8.66 | 33.80 | | 178 | 200 | 8.05 | 33.93 | | 26.45 | 159 | 0.48 |
| 198 | 8.08 | 33.93 | | 159 | 250 | 7.51 | 34.00 | | 26.58 | 146 | 0.56 |
| 252 | 7.50 | 34.00 | | 146 | 300 | 6.99 | 34.05 | | 26.69 | 136 | 0.64 |
| 299 | 7.00 | 34.05 | | 136 | 400 | 6.26 | 34.11 | | 26.84 | 122 | 0.77 |
| 405 | 6.22 | 34.11 | | 122 | 500 | 5.67 | 34.17 | | 26.96 | 110 | 0.89 |
| 509 | 5.62 | 34.18 | | 109 | 600 | 5.28 | 34.33 | | 27.13 | 94 | 1.00 |
| 619 | 5.24 | 34.36 | | 91 | | | | | | | |
| PAOLINA-T; September 7, 1952; 1342 GCT; 32°01'N, 120°39.5'W; sounding, 2100 fm; wind, 330°, force 4; weather, clear; sea, rough; wire angle, 30°. | | | | | | | | | | | 90.70 |
| 0 | 16.62 | 33.01 | 5.61 | 383 | 0 | 16.62 | 33.01 | 5.61 | 24.10 | 383 | 0.00 |
| 9 | 16.62 | 33.01 | 5.69 | 383 | 10 | 16.62 | 33.01 | 5.68 | 24.10 | 383 | 0.04 |
| 23 | 16.64 | 33.03 | 5.60 | 382 | 20 | 16.63 | 33.03 | 5.61 | 24.11 | 381 | 0.08 |
| 44 | 16.48 | 32.94 | 5.64 | 385 | 30 | 16.60 | 33.02 | 5.60 | 24.11 | 381 | 0.11 |
| 65 | 13.30 | 32.97 | 6.43 | 317 | 50 | 16.35 | 32.95 | 5.70 | 24.11 | 381 | 0.19 |
| 85 | 11.58 | 33.03 | 5.51 | 282 | 75 | 12.45 | 32.99 | 6.35 | 24.97 | 300 | 0.28 |
| 129 | 9.38 | 33.35 | 4.12 | 222 | 100 | 10.52 | 33.09 | 4.85 | 25.39 | 259 | 0.35 |
| 168 | 8.74 | 33.64 | 3.15 | 191 | 150 | 9.00 | 33.52 | 3.58 | 25.98 | 203 | 0.46 |
| 249 | 7.82 | 33.95 | 2.48 | 154 | 200 | 8.34 | 33.80 | 2.80 | 26.30 | 173 | 0.56 |
| 334 | 7.18 | 33.98 | 1.54 | 143 | 250 | 7.81 | 33.95 | 2.46 | 26.50 | 154 | 0.64 |
| 413 | 6.40 | 33.96 | 1.28 | 135 | 300 | 7.43 | 33.98 | 1.96 | 26.58 | 147 | 0.72 |
| 496 | 5.64 | 34.07 | 0.54 | 118 | 400 | 6.54 | 33.96 | 1.35 | 26.68 | 137 | 0.87 |
| 661 | 5.01 | 34.27 | 0.27 | 96 | 500 | 5.62 | 34.08 | 0.53 | 26.89 | 117 | 1.00 |
| 830 | 4.35 | 34.45 | 0.39 | 75 | 600 | 5.25 | 34.21 | 0.34 | 27.04 | 103 | 1.12 |
| 1014 | 3.79 | 34.45 | 0.64 | 69 | 700 | 4.86 | 34.32 | 0.28 | 27.17 | 90 | 1.22 |
| | | | | | 800 | 4.47 | 34.42 | 0.35 | 27.30 | 79 | 1.31 |
| | | | | | 1000 | 3.82 | 34.45 | 0.62 | 27.39 | 70 | 1.48 |
| PAOLINA-T; September 5, 1952; 1945 GCT; 32°55.5'N, 117°18.5'W; sounding, 48 fm; wind, 300°, force 1; weather, partly cloudy; sea, slight; wire angle, 02°. | | | | | | | | | | | 93.27 |
| 0 | 19.02 | 33.31 | 5.99 | 416 | 0 | 19.02 | 33.31 | 5.99 | 23.75 | 416 | 0.00 |
| 10 | 12.65 | 33.21 | 6.80 | 287 | 10 | 12.65 | 33.21 | 6.80 | 25.10 | 287 | 0.04 |
| 20 | 11.56 | 33.22 | 5.77 | 267 | 20 | 11.56 | 33.22 | 5.77 | 25.31 | 267 | 0.06 |
| 31 | 10.80 | 33.28 | 4.51 | 250 | 30 | 10.83 | 33.27 | 4.65 | 25.48 | 251 | 0.09 |
| 50 | 10.55 | 33.48 | 3.71 | 231 | 50 | 10.55 | 33.48 | 3.71 | 25.69 | 231 | 0.14 |

SIO

CCOFI
5209

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 93.30 | PAOLINA-T; September 5, 1952; 1630 GCT; 32°50.5'N, 117°23'W; sounding, 380 fm; wind, 300°, force 1; weather, clear; sea, slight; wire angle, 10°. | | | | | | | | | | |
| 0 | 19.68 | 33.35 | 5.69 | 429 | 0 | 19.68 | 33.35 | 5.69 | 23.61 | 429 | 0.00 |
| 10 | 15.74 | 33.21 | 6.37 | 349 | 10 | 15.74 | 33.21 | 6.37 | 24.45 | 349 | 0.04 |
| 25 | 12.67 | 33.19 | 6.89 | 289 | 20 | 13.32 | 33.19 | 6.83 | 24.95 | 302 | 0.07 |
| 49 | 10.66 | 33.40 | 3.83 | 239 | 30 | 12.13 | 33.20 | 6.85 | 25.19 | 279 | 0.10 |
| 74 | 10.08 | 33.46 | 3.42 | 225 | 50 | 10.58 | 33.41 | 3.79 | 25.63 | 236 | 0.15 |
| 95 | 9.98 | 33.67 | 2.72 | 207 | 75 | 10.06 | 33.47 | 3.41 | 25.77 | 224 | 0.21 |
| 145 | 9.77 | 33.86 | 2.03 | 190 | 100 | 9.94 | 33.69 | 2.65 | 25.96 | 205 | 0.26 |
| 191 | 9.58 | 34.07 | 1.61 | 171 | 150 | 9.74 | 33.89 | 1.99 | 26.15 | 187 | 0.36 |
| 236 | 9.53 | 34.25 | 1.10 | 157 | 200 | 9.57 | 34.11 | 1.54 | 26.35 | 168 | 0.45 |
| 93.40 | PAOLINA-T; September 5, 1952; 1005 GCT; 32°29'N, 118°07'W; sounding, 950 fm; wind, 290°, force 3; weather, cloudy; sea, missing; wire angle, 03°. | | | | | | | | | | |
| 0 | 18.95 | 33.21 | 5.47 | 422 | 0 | 18.95 | 33.21 | 5.47 | 23.69 | 422 | 0.00 |
| 10 | 18.72 | 33.28 | 5.44 | 411 | 10 | 18.72 | 33.28 | 5.44 | 23.80 | 411 | 0.04 |
| 20 | 17.30 | 33.17 | 5.74 | 386 | 20 | 17.30 | 33.17 | 5.74 | 24.06 | 386 | 0.08 |
| 35 | 14.98 | 32.99 | 6.27 | 349 | 30 | 15.90 | 33.01 | 6.20 | 24.26 | 367 | 0.12 |
| 50 | 12.65 | 32.95 | 6.00 | 307 | 50 | 12.65 | 32.95 | 6.00 | 24.90 | 307 | 0.19 |
| 65 | 11.51 | 33.03 | 5.56 | 280 | 75 | 11.20 | 33.04 | 5.44 | 25.24 | 274 | 0.26 |
| 80 | 10.98 | 33.04 | 5.38 | 270 | 100 | 9.89 | 33.34 | 4.23 | 25.70 | 230 | 0.32 |
| 99 | 9.96 | 33.31 | 4.30 | 234 | 150 | 8.51 | 33.82 | 3.02 | 26.29 | 174 | 0.43 |
| 153 | 8.48 | 33.83 | 2.98 | 173 | 200 | 8.18 | 33.93 | 2.53 | 26.43 | 161 | 0.51 |
| 200 | 8.18 | 33.93 | 2.53 | 161 | 250 | 7.91 | 34.16 | 1.88 | 26.65 | 140 | 0.59 |
| 249 | 7.92 | 34.16 | 1.91 | 140 | 300 | 7.67 | 34.14 | 1.14 | 26.67 | 138 | 0.66 |
| 297 | 7.70 | 34.14 | 1.18 | 139 | 400 | 7.13 | 34.34 | | 26.90 | 116 | 0.79 |
| 401 | 7.12 | 34.34 | - | 116 | 500 | 6.30 | 34.25 | 0.36 | 26.94 | 112 | 0.91 |
| 500 | 6.30 | 34.25 | 0.36 | 112 | 600 | 5.67 | 34.32 | 0.32 | 27.08 | 99 | 1.03 |
| 606 | 5.64 | 34.33 | 0.32 | 98 | | | | | | | |
| 93.50 | PAOLINA-T; September 5, 1952; 0321 GCT; 32°03.5'N, 118°51.5'W; sounding, 750 fm; wind, 300°, force 4; weather, partly cloudy; sea, missing; wire angle, 10°. | | | | | | | | | | |
| 0 | 18.24 | 33.17 | 5.51 | 408 | 0 | 18.24 | 33.17 | 5.51 | 23.83 | 408 | 0.00 |
| 10 | 18.26 | 33.12 | 5.54 | 412 | 10 | 18.26 | 33.12 | 5.54 | 23.79 | 412 | 0.04 |
| 20 | 17.32 | 33.12 | 5.77 | 390 | 20 | 17.32 | 33.12 | 5.77 | 24.02 | 390 | 0.08 |
| 34 | 15.07 | 33.17 | 6.31 | 338 | 30 | 15.80 | 33.15 | 6.30 | 24.39 | 355 | 0.12 |
| 53 | 12.32 | 33.03 | 5.51 | 295 | 50 | 12.83 | 33.04 | 5.75 | 24.93 | 303 | 0.18 |
| 68 | 11.04 | 33.12 | 4.81 | 266 | 75 | 10.75 | 33.15 | 4.87 | 25.40 | 258 | 0.26 |
| 82 | 10.51 | 33.21 | 4.91 | 250 | 100 | 9.98 | 33.41 | 4.16 | 25.74 | 227 | 0.32 |
| 106 | 9.79 | 33.46 | 4.05 | 220 | 150 | 8.96 | 33.73 | 3.51 | 26.15 | 187 | 0.42 |
| 158 | 8.83 | 33.77 | 3.39 | 182 | 200 | 8.27 | 33.91 | 2.39 | 26.40 | 164 | 0.51 |
| 211 | 8.12 | 33.94 | 2.16 | 159 | 250 | 7.83 | 34.05 | 1.64 | 26.57 | 147 | 0.59 |
| 268 | 7.69 | 34.09 | 1.46 | 142 | 300 | 7.37 | 34.16 | 1.23 | 26.73 | 133 | 0.66 |
| 317 | 7.28 | 34.18 | 1.11 | 130 | 400 | 6.88 | 34.26 | 0.68 | 26.87 | 119 | 0.79 |
| 430 | 6.72 | 34.27 | 0.53 | 116 | 500 | 6.35 | 34.27 | 0.34 | 26.95 | 111 | 0.91 |
| 538 | 6.13 | 34.27 | 0.28 | 108 | 600 | 5.78 | 34.27 | 0.29 | 27.03 | 104 | 1.03 |
| 647 | 5.53 | 34.27 | 0.30 | 101 | | | | | | | |
| 97.30 | PAOLINA-T; September 4, 1952; 0143 GCT; 32°15'N, 117°09'W; sounding, 35 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 18.82 | 33.31 | 5.73 | 411 | 0 | 18.82 | 33.31 | 5.73 | 23.80 | 411 | 0.00 |
| 10 | 15.46 | 33.33 | 6.53 | 334 | 10 | 15.46 | 33.33 | 6.53 | 24.61 | 334 | 0.04 |
| 20 | 12.04 | 33.35 | 5.02 | 266 | 20 | 12.04 | 33.35 | 5.02 | 25.32 | 266 | 0.07 |
| 30 | 11.66 | 33.39 | 5.00 | 256 | 30 | 11.66 | 33.39 | 5.00 | 25.42 | 256 | 0.09 |
| 50 | 10.96 | 33.46 | 3.96 | 239 | 50 | 10.96 | 33.46 | 3.96 | 25.60 | 239 | 0.14 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PAOLINA-T; September 4, 1952; 0626 GCT; 32°11'N, 117°17'W; sounding, 770 fm; wind, 290°, force 2; weather, clear; sea, missing; wire angle, 02°. | | | | | | | | | | | 97.32 |
| 0 | 19.43 | 33.35 | 5.60 | 423 | 0 | 19.43 | 33.35 | 5.60 | 23.67 | 423 | 0.00 |
| 10 | 18.29 | 33.24 | 6.04 | 404 | 10 | 18.29 | 33.24 | 6.04 | 23.88 | 404 | 0.04 |
| 26 | 12.33 | 33.35 | 6.32 | 271 | 20 | 15.60 | 33.31 | 6.28 | 24.56 | 339 | 0.08 |
| 50 | 10.26 | 33.43 | 3.73 | 230 | 30 | 11.30 | 33.36 | 6.26 | 25.47 | 252 | 0.11 |
| 73 | 10.15 | 33.66 | 2.49 | 211 | 50 | 10.26 | 33.43 | 3.73 | 25.70 | 230 | 0.16 |
| 98 | 10.07 | 33.71 | 2.30 | 206 | 75 | 10.14 | 33.66 | 2.48 | 25.90 | 211 | 0.21 |
| 151 | 9.82 | 33.89 | 2.00 | 189 | 100 | 10.05 | 33.71 | 2.29 | 25.96 | 206 | 0.26 |
| 200 | 10.06 | 34.16 | 1.20 | 172 | 150 | 9.83 | 33.88 | 2.02 | 26.13 | 190 | 0.36 |
| 251 | 9.34 | 34.13 | 1.41 | 163 | 200 | 10.06 | 34.16 | 1.20 | 26.31 | 172 | 0.46 |
| 299 | 9.13 | 34.28 | 0.94 | 149 | 250 | 9.33 | 34.13 | 1.40 | 26.40 | 163 | 0.54 |
| 354 | 8.49 | 34.29 | 0.88 | 139 | 300 | 9.12 | 34.28 | 0.93 | 26.56 | 149 | 0.62 |
| 404 | 7.54 | 34.16 | 1.03 | 135 | 400 | 7.57 | 34.16 | 1.04 | 26.70 | 135 | 0.77 |
| 454 | 7.47 | 34.27 | 0.56 | 126 | 500 | 7.20 | 34.29 | 0.45 | 26.85 | 121 | 0.91 |
| 503 | 7.18 | 34.29 | 0.42 | 120 | 600 | 6.21 | 34.31 | 0.28 | 27.00 | 106 | 1.03 |
| 610 | 6.11 | 34.31 | 0.28 | 105 | | | | | | | |
| PAOLINA-T; September 4, 1952; 1232 GCT; 31°53'N, 117°51'W; sounding, 900 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 35°. | | | | | | | | | | | 97.40 |
| 0 | 20.06 | 33.42 | 5.18 | 434 | 0 | 20.06 | 33.42 | 5.18 | 23.56 | 434 | 0.00 |
| 8 | 20.06 | 33.42 | 5.34 | 434 | 10 | 20.06 | 33.42 | 5.33 | 23.56 | 434 | 0.04 |
| 16 | 20.06 | 33.40 | 5.29 | 435 | 20 | 19.60 | 33.39 | 5.33 | 23.66 | 424 | 0.09 |
| 28 | 16.86 | 33.35 | 6.37 | 363 | 30 | 16.00 | 33.34 | 6.60 | 24.49 | 345 | 0.12 |
| 40 | 12.95 | 33.31 | 6.96 | 286 | 50 | 10.98 | 33.40 | 4.44 | 25.55 | 244 | 0.18 |
| 50 | 10.98 | 33.40 | 4.44 | 244 | 75 | 9.86 | 33.68 | 3.02 | 25.97 | 205 | 0.24 |
| 60 | 10.25 | 33.53 | 3.03 | 222 | 100 | 10.01 | 33.99 | 1.95 | 26.18 | 184 | 0.29 |
| 75 | 9.86 | 33.68 | 3.02 | 205 | 150 | 9.74 | 34.05 | 1.61 | 26.27 | 176 | 0.38 |
| 114 | 10.06 | 34.04 | 1.65 | 181 | 200 | 9.68 | 34.26 | 1.31 | 26.45 | 159 | 0.47 |
| 149 | 9.74 | 34.05 | 1.62 | 176 | 250 | 9.23 | 34.27 | 1.11 | 26.53 | 151 | 0.55 |
| 187 | 9.71 | 34.25 | 1.47 | 160 | 300 | 8.71 | 34.27 | 1.05 | 26.61 | 143 | 0.62 |
| 224 | 9.53 | 34.27 | 1.15 | 156 | 400 | 7.87 | 34.31 | 0.64 | 26.77 | 128 | 0.76 |
| 307 | 8.65 | 34.27 | 1.02 | 142 | 500 | (6.70) | (34.31) | (0.57) | (26.94) | (113) | (0.89) |
| 390 | 8.00 | 34.31 | 0.66 | 130 | | | | | | | |
| 484 | 6.88 | 34.31 | 0.58 | 115 | | | | | | | |
| PAOLINA-T; September 4, 1952; 1934 GCT; 31°30'N, 118°32'W; sounding, 2100 fm; wind, 300°, force 4; weather, cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | | 97.50 |
| 0 | 18.96 | 33.28 | 5.28 | 417 | 0 | 18.96 | 33.28 | 5.28 | 23.74 | 417 | 0.00 |
| 11 | 18.96 | 33.28 | 4.78 | 417 | 10 | 18.96 | 33.28 | 4.78 | 23.74 | 417 | 0.04 |
| 25 | 18.40 | 33.28 | 5.36 | 403 | 20 | 18.88 | 33.28 | 5.00 | 23.76 | 415 | 0.08 |
| 38 | 16.26 | 33.22 | 5.81 | 359 | 30 | 17.50 | 33.27 | 5.55 | 24.09 | 383 | 0.12 |
| 55 | 14.37 | 33.22 | 5.95 | 320 | 50 | 14.83 | 33.22 | 5.94 | 24.66 | 329 | 0.19 |
| 69 | 13.33 | 33.22 | 5.88 | 300 | 75 | 12.95 | 33.22 | 5.69 | 25.05 | 292 | 0.27 |
| 86 | 11.75 | 33.22 | 5.37 | 270 | 100 | 10.43 | 33.23 | 5.01 | 25.52 | 247 | 0.34 |
| 107 | 10.28 | 33.24 | 4.78 | 244 | 150 | 9.74 | 33.75 | 3.01 | 26.04 | 198 | 0.45 |
| 160 | 9.60 | 33.87 | 2.81 | 187 | 200 | 8.86 | 33.99 | 2.54 | 26.37 | 166 | 0.55 |
| 213 | 8.62 | 34.02 | 2.51 | 161 | 250 | 8.11 | 34.12 | 2.73 | 26.59 | 146 | 0.63 |
| 266 | 7.93 | 34.16 | 2.79 | 140 | 300 | 7.71 | 34.21 | 2.65 | 26.72 | 133 | 0.70 |
| 320 | 7.56 | 34.22 | 2.51 | 131 | 400 | 6.87 | 34.24 | 2.05 | 26.86 | 120 | 0.83 |
| 425 | 6.70 | 34.25 | 1.91 | 117 | 500 | 6.34 | 34.25 | 1.59 | 26.94 | 113 | 0.95 |
| 538 | 6.12 | 34.25 | 1.38 | 110 | 600 | 5.72 | 34.25 | 0.73 | 27.02 | 105 | 1.07 |
| 652 | 5.38 | 34.27 | 0.38 | 100 | | | | | | | |
| CREST; September 4, 1952; 0425 GCT; 31°42'N, 116°43.5'W; sounding, 83 fm; wind, 300°, force 1; weather, partly cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | | 100.29 |
| 0 | 14.93 | 33.37 | 6.84 | 320 | 0 | 14.93 | 33.37 | 6.84 | 24.75 | 320 | 0.00 |
| 10 | 11.98 | 33.28 | 5.87 | 270 | 10 | 11.98 | 33.28 | 5.87 | 25.28 | 270 | 0.03 |
| 20 | 11.09 | 33.33 | 5.07 | 251 | 20 | 11.09 | 33.33 | 5.07 | 25.48 | 251 | 0.06 |
| 30 | 10.70 | 33.39 | 4.15 | 240 | 30 | 10.70 | 33.39 | 4.15 | 25.60 | 240 | 0.08 |
| 50 | 10.25 | 33.42 | 4.06 | 230 | 50 | 10.25 | 33.42 | 4.06 | 25.70 | 230 | 0.13 |

SIO

CCOFI 5209

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

100.30 CREST; September 4, 1952; 0553 GCT; 31°40.5'N, 116°46.5'W; sounding, 270 fm; wind, 300°, force 1; weather, partly cloudy; sea, slight; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.24 | 33.42 | 6.46 | 390 | 0 | 18.24 | 33.42 | 6.46 | 24.03 | 390 | 0.00 |
| 9 | 17.31 | 33.40 | 6.73 | 370 | 10 | 17.21 | 33.40 | 6.73 | 24.26 | 367 | 0.04 |
| 24 | 11.90 | 33.35 | 5.54 | 264 | 20 | 13.40 | 33.36 | 6.58 | 25.06 | 291 | 0.07 |
| 47 | 10.38 | 33.53 | 3.62 | 224 | 30 | 11.30 | 33.36 | 4.65 | 25.47 | 252 | 0.10 |
| 70 | 10.23 | 33.60 | 3.07 | 217 | 50 | 10.33 | 33.55 | 3.44 | 25.79 | 222 | 0.15 |
| 93 | 9.98 | 33.66 | 3.08 | 208 | 75 | 10.18 | 33.61 | 3.07 | 25.86 | 215 | 0.20 |
| 141 | 9.95 | 33.73 | 2.73 | 203 | 100 | 9.97 | 33.67 | 3.06 | 25.94 | 207 | 0.25 |
| 188 | 10.09 | 34.13 | 1.47 | 175 | 150 | 9.98 | 33.76 | 2.57 | 26.01 | 201 | 0.36 |
| 234 | 9.90 | 34.25 | 1.09 | 163 | 200 | 10.05 | 34.20 | 1.33 | 26.34 | 169 | 0.45 |
| 280 | 9.41 | 34.25 | 0.87 | 156 | 250 | 9.74 | 34.25 | 0.99 | 26.43 | 161 | 0.54 |
| 332 | 8.81 | 34.23 | 0.92 | 148 | 300 | 9.16 | 34.24 | 0.89 | 26.52 | 152 | 0.62 |
| 379 | 8.51 | 34.29 | 0.77 | 139 | | | | | | | |

100.40 CREST; September 4, 1952; 1123 GCT; 31°21'N, 117°27'W; sounding, 1050 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.28 | 33.40 | 5.21 | 441 | 0 | 20.28 | 33.40 | 5.21 | 23.49 | 441 | 0.00 |
| 10 | 20.27 | 33.40 | 5.21 | 440 | 10 | 20.27 | 33.40 | 5.21 | 23.49 | 440 | 0.04 |
| 25 | 15.88 | 33.15 | 5.98 | 356 | 20 | 17.00 | 33.19 | 5.82 | 24.15 | 378 | 0.09 |
| 50 | 13.71 | 33.10 | 6.33 | 316 | 30 | 15.37 | 33.13 | 6.13 | 24.47 | 347 | 0.12 |
| 79 | 11.80 | 33.19 | 5.49 | 274 | 50 | 13.71 | 33.10 | 6.33 | 24.80 | 316 | 0.19 |
| 108 | 10.22 | 33.46 | 4.04 | 227 | 75 | 12.12 | 33.16 | 5.74 | 25.16 | 281 | 0.26 |
| 160 | 9.24 | 33.86 | 3.10 | 182 | 100 | 10.48 | 33.39 | 4.38 | 25.63 | 236 | 0.33 |
| 211 | 8.30 | 34.01 | 2.68 | 157 | 150 | 9.45 | 33.81 | 3.22 | 26.14 | 189 | 0.44 |
| 313 | 7.43 | 34.18 | 1.34 | 132 | 200 | 8.48 | 33.99 | 2.76 | 26.43 | 161 | 0.52 |
| 421 | 7.21 | 34.31 | 0.46 | 119 | 250 | 8.72 | 34.15 | 2.24 | 26.52 | 152 | 0.60 |
| 524 | 6.51 | 34.31 | 0.30 | 110 | 300 | 7.52 | 34.17 | 1.51 | 26.71 | 134 | 0.68 |
| 627 | 5.80 | 34.36 | 0.29 | 98 | 400 | 7.29 | 34.29 | 0.57 | 26.84 | 122 | 0.81 |
| 831 | 4.68 | 34.42 | 0.32 | 81 | 500 | 6.69 | 34.31 | 0.30 | 26.94 | 112 | 0.94 |
| 1038 | 3.99 | 34.43 | 0.54 | 73 | 600 | 5.99 | 34.35 | 0.30 | 27.06 | 101 | 1.05 |
| 1237 | 3.63 | 34.49 | 0.81 | 65 | 700 | 5.33 | 34.39 | 0.29 | 27.17 | 90 | 1.15 |
| | | | | | 800 | 4.81 | 34.41 | 0.31 | 27.25 | 83 | 1.25 |
| | | | | | 1000 | 4.08 | 34.43 | 0.49 | 27.35 | 74 | 1.42 |

100.50 CREST; September 4, 1952; 1703 GCT; 31°01'N, 118°07'W; sounding, 2000 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 33°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.11 | 33.44 | 5.37 | 433 | 0 | 20.11 | 33.44 | 5.37 | 23.57 | 433 | 0.00 |
| 8 | 20.12 | 33.40 | 5.40 | 437 | 10 | 20.12 | 33.40 | 5.39 | 23.53 | 437 | 0.04 |
| 17 | 20.12 | 33.39 | 5.38 | 437 | 20 | 20.10 | 33.38 | 5.38 | 23.52 | 437 | 0.09 |
| 29 | 16.66 | 33.21 | 6.14 | 369 | 30 | 16.55 | 33.21 | 6.26 | 24.27 | 366 | 0.13 |
| 45 | 13.53 | 33.22 | 6.76 | 303 | 50 | 12.92 | 33.21 | 6.72 | 25.04 | 293 | 0.19 |
| 57 | 11.80 | 33.19 | 5.40 | 274 | 75 | 10.28 | 33.34 | 4.64 | 25.63 | 237 | 0.26 |
| 69 | 10.53 | 33.28 | 4.88 | 245 | 100 | 9.72 | 33.54 | 4.07 | 25.88 | 213 | 0.32 |
| 87 | 9.90 | 33.44 | 4.28 | 223 | 150 | 9.01 | 33.85 | 3.15 | 26.24 | 179 | 0.42 |
| 128 | 9.31 | 33.71 | 3.74 | 194 | 200 | 8.80 | 34.14 | 1.99 | 26.50 | 154 | 0.50 |
| 166 | 8.87 | 33.96 | 2.69 | 169 | 250 | 8.75 | 34.31 | 1.09 | 26.64 | 141 | 0.58 |
| 210 | 8.79 | 34.18 | 1.74 | 151 | 300 | 8.33 | 34.31 | 0.78 | 26.70 | 135 | 0.65 |
| 246 | 8.77 | 34.31 | 1.13 | 141 | 400 | 7.00 | 34.26 | 0.53 | 26.86 | 120 | 0.78 |
| 336 | 7.89 | 34.31 | 0.67 | 129 | 500 | 6.12 | 34.30 | 0.37 | 27.01 | 106 | 0.90 |
| 427 | 6.70 | 34.25 | 0.51 | 117 | | | | | | | |
| 523 | 6.00 | 34.31 | 0.33 | 104 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; September 4, 1952; 2237 GCT; 30°41'N, 118°48'W; sounding, 2000 fm; wind, 300°, force 5; weather, cloudy; sea, very rough; wire angle, 38°. 100.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.18 | 33.24 | 5.52 | 425 | 0 | 19.18 | 33.24 | 5.52 | 23.65 | 425 | 0.00 |
| 8 | 19.16 | 33.26 | 5.97 | 423 | 10 | 19.16 | 33.26 | 6.00 | 23.67 | 423 | 0.04 |
| 24 | 18.12 | 33.16 | 6.15 | 406 | 20 | 19.15 | 33.18 | 6.12 | 23.62 | 429 | 0.09 |
| 47 | 14.74 | 33.12 | 6.35 | 335 | 30 | 16.60 | 33.14 | 6.21 | 24.20 | 373 | 0.13 |
| 72 | 13,65 | 33.12 | 6.27 | 313 | 50 | 14.60 | 33.12 | 6.34 | 24.63 | 332 | 0.20 |
| 94 | 12.41 | 33.13 | 6.22 | 289 | 75 | 13.50 | 33.12 | 6.24 | 24.86 | 310 | 0.28 |
| 137 | 9.70 | 33.42 | 4.62 | 222 | 100 | 11.87 | 33.14 | 6.18 | 25.19 | 279 | 0.35 |
| 178 | 8.97 | 33.80 | 3.79 | 182 | 150 | 9.46 | 33.55 | 4.25 | 25.93 | 208 | 0.47 |
| 264 | 7.86 | 34.09 | 2.45 | 145 | 200 | 8.65 | 33.91 | 3.43 | 26.34 | 169 | 0.57 |
| 349 | 7.20 | 34.20 | 1.00 | 127 | 250 | 8.01 | 34.05 | 2.66 | 26.55 | 150 | 0.65 |
| 439 | 6.57 | 34.23 | 0.72 | 117 | 300 | 7.58 | 34.15 | 1.80 | 26.69 | 136 | 0.72 |
| 525 | 6.08 | 34.27 | 0.58 | 108 | 400 | 6.82 | 34.22 | 0.80 | 26.85 | 121 | 0.86 |
| 709 | 5.06 | 34.42 | 0.45 | 85 | 500 | 6.22 | 34.26 | 0.61 | 26.96 | 110 | 0.98 |
| 897 | 4.24 | 34.47 | 0.51 | 72 | 600 | 5.63 | 34.33 | 0.50 | 27.09 | 98 | 1.09 |
| 1094 | 3.67 | 34.49 | 0.77 | 65 | 700 | 5.11 | 34.43 | 0.45 | 27.23 | 85 | 1.19 |
| | | | | | 800 | 4.65 | 34.45 | 0.47 | 27.30 | 78 | 1.28 |
| | | | | | 1000 | 3.91 | 34.49 | 0.62 | 27.41 | 68 | 1.44 |

CREST; September 5, 1952; 0454, 0520 GCT; 30°21'N, 119°27'W; sounding, 2000 fm; wind, 300°, force 6; weather, cloudy; sea, rough; wire angle, 32°, 35°. 100.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.74 | 33.19 | 5.60 | 418 | 0 | 18.74 | 33.19 | 5.60 | 23.73 | 418 | 0.00 |
| 9 | 18.74 | 33.19 | 5.97 | 418 | 10 | 18.74 | 33.19 | 6.00 | 23.73 | 418 | 0.04 |
| 17 | 18.74 | 33.13 | 6.02 | 422 | 20 | 18.74 | 33.13 | 6.02 | 23.68 | 422 | 0.08 |
| 30 | 17.50 | 33.19 | 5.51 | 389 | 30 | 17.50 | 33.19 | 5.51 | 24.03 | 389 | 0.12 |
| 47 | 15.20 | 33.17 | 6.30 | 341 | 50 | 15.00 | 33.17 | 6.31 | 24.58 | 336 | 0.20 |
| 60 | 14.29 | 33.17 | 6.31 | 322 | 75 | 13.30 | 33.14 | 6.48 | 24.91 | 305 | 0.28 |
| 72 | 13.46 | 33.15 | 6.51 | 307 | 100 | 11.57 | 33.14 | 5.50 | 25.25 | 273 | 0.35 |
| 92 | 12.10 | 33.12 | 5.76 | 284 | 150 | 9.42 | 33.44 | 4.48 | 25.85 | 216 | 0.47 |
| 138 | 9.66 | 33.33 | 4.77 | 228 | 200 | 8.63 | 33.92 | 3.51 | 26.35 | 168 | 0.57 |
| 182 | 8.87 | 33.84 | 3.92 | 178 | 250 | 8.04 | 34.02 | 2.61 | 26.52 | 152 | 0.65 |
| 232 | 8.24 | 34.00 | 2.83 | 157 | 300 | 7.49 | 34.07 | 2.06 | 26.64 | 141 | 0.73 |
| 276 | 7.74 | 34.05 | 2.37 | 146 | 400 | 6.54 | 34.14 | 1.22 | 26.83 | 123 | 0.87 |
| | | | | | 500 | 5.94 | 34.22 | 0.63 | 26.97 | 110 | 0.99 |
| 378 | 6.70 | 34.13 | 1.38 | 126 | 600 | (5.52) | (34.30) | | (27.08) | (99) | (1.10) |
| 479 | 6.04 | 34.20 | 0.72 | 113 | | | | | | | |
| 586 | 5.58 | 34.29 | 0.42 | 100 | | | | | | | |

CREST; September 5, 1952; 1059 GCT; 30°01'N, 120°07'W; sounding, 2000 fm; wind, 360°, force 5; weather, partly cloudy; sea, rough; wire angle, 18°. 100.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.10 | 33.17 | 5.61 | 404 | 0 | 18.10 | 33.17 | 5.61 | 23.87 | 404 | 0.00 |
| 9 | 18.08 | 33.17 | 5.60 | 404 | 10 | 18.08 | 33.17 | 5.60 | 23.87 | 404 | 0.04 |
| 28 | 17.07 | 33.10 | 5.72 | 386 | 20 | 18.02 | 33.11 | 5.67 | 23.84 | 407 | 0.08 |
| 57 | 14.69 | 33.17 | 6.27 | 330 | 30 | 16.88 | 33.10 | 5.75 | 24.11 | 382 | 0.12 |
| 85 | 12.58 | 33.06 | 5.89 | 297 | 50 | 15.03 | 33.16 | 6.22 | 24.57 | 338 | 0.19 |
| 112 | 10.02 | 33.21 | 4.92 | 242 | 75 | 13.75 | 33.07 | 6.08 | 24.77 | 319 | 0.28 |
| 165 | 8.72 | 33.73 | 3.77 | 184 | 100 | 10.80 | 33.12 | 5.45 | 25.37 | 262 | 0.35 |
| 218 | 8.00 | 33.93 | 3.09 | 158 | 150 | 9.05 | 33.59 | 4.06 | 26.03 | 199 | 0.46 |
| 322 | 6.91 | 34.05 | 1.70 | 135 | 200 | 8.24 | 33.90 | 3.31 | 26.40 | 164 | 0.56 |
| 423 | 6.24 | 34.16 | 0.79 | 118 | 250 | 7.65 | 33.97 | 2.66 | 26.54 | 151 | 0.64 |
| 529 | 5.88 | 34.25 | 0.33 | 107 | 300 | 7.12 | 34.02 | 1.98 | 26.65 | 140 | 0.71 |
| 632 | 5.30 | 34.33 | 0.28 | 94 | 400 | 6.38 | 34.13 | 0.95 | 26.84 | 122 | 0.85 |
| 847 | 4.28 | 34.42 | 0.48 | 77 | 500 | 5.98 | 34.23 | 0.40 | 26.97 | 110 | 0.97 |
| 1058 | 3.62 | 34.51 | 0.76 | 63 | 600 | 5.49 | 34.31 | 0.29 | 27.09 | 98 | 1.08 |
| 1268 | 3.17 | 34.51 | 1.00 | 59 | 700 | 4.93 | 34.36 | 0.30 | 27.20 | 88 | 1.18 |
| | | | | | 800 | 4.48 | 34.40 | 0.40 | 27.28 | 80 | 1.27 |
| | | | | | 1000 | 3.78 | 34.50 | 0.68 | 27.43 | 66 | 1.44 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **103.30** | CREST; September 6, 1952; 1335 GCT; 31°05'N, 116°25'W; sounding, 40 fm; wind, 020°, force 3; weather, partly cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 16.01 | 33.30 | 5.99 | 348 | 0 | 16.01 | 33.30 | 5.99 | 24.46 | 348 | 0.00 |
| 10 | 15.54 | 33.26 | 6.18 | 341 | 10 | 15.54 | 33.26 | 6.18 | 24.53 | 341 | 0.03 |
| 20 | 12.22 | 33.28 | 5.87 | 274 | 20 | 12.22 | 33.28 | 5.87 | 25.23 | 274 | 0.07 |
| 30 | 11.38 | 33.28 | 5.37 | 260 | 30 | 11.38 | 33.28 | 5.37 | 25.39 | 260 | 0.09 |
| 50 | 10.80 | 33.46 | 3.74 | 236 | 50 | 10.80 | 33.46 | 3.74 | 25.63 | 236 | 0.14 |
| **103.35** | CREST; September 6, 1952; 1013 GCT; 30°57'N, 116°46'W; sounding, 900 fm; wind, 330°, force 5; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 15.07 | 33.33 | 6.69 | 326 | 0 | 15.07 | 33.33 | 6.69 | 24.69 | 326 | 0.00 |
| 10 | 15.04 | 33.35 | 6.64 | 324 | 10 | 15.04 | 33.35 | 6.64 | 24.71 | 324 | 0.03 |
| 20 | 14.80 | 33.28 | 6.49 | 324 | 20 | 14.80 | 33.28 | 6.49 | 24.71 | 324 | 0.06 |
| 35 | 12.14 | 33.26 | 5.88 | 274 | 30 | 13.18 | 33.26 | 6.09 | 25.03 | 294 | 0.10 |
| 49 | 10.76 | 33.31 | 5.21 | 247 | 50 | 10.74 | 33.31 | 5.12 | 25.53 | 247 | 0.15 |
| 63 | 10.56 | 33.53 | 3.23 | 227 | 75 | 10.46 | 33.63 | 3.35 | 25.82 | 218 | 0.21 |
| 78 | 10.45 | 33.64 | 3.37 | 217 | 100 | 10.22 | 33.72 | 2.56 | 25.94 | 208 | 0.26 |
| 97 | 10.22 | 33.71 | 2.66 | 208 | 150 | 10.31 | 34.08 | 1.53 | 26.20 | 182 | 0.36 |
| 147 | 10.30 | 34.05 | 1.59 | 185 | 200 | 10.33 | 34.28 | 1.15 | 26.35 | 168 | 0.45 |
| 194 | 10.35 | 34.27 | 1.14 | 169 | 250 | 9.98 | 34.33 | 1.20 | 26.45 | 159 | 0.53 |
| 240 | 10.12 | 34.33 | 1.21 | 161 | 300 | 8.63 | 34.26 | 1.18 | 26.62 | 143 | 0.61 |
| 287 | 8.98 | 34.29 | 1.17 | 146 | 400 | 7.01 | 34.05 | 1.38 | 26.69 | 136 | 0.76 |
| 386 | 7.08 | 34.04 | 1.42 | 138 | 500 | 6.49 | 34.25 | | 26.92 | 114 | 0.89 |
| 483 | 6.60 | 34.23 | - | 117 | 600 | (5.91) | (34.31) | | (27.04) | (103) | (1.01) |
| 588 | 5.97 | 34.31 | 0.44 | 104 | | | | | | | |
| **103.40** | CREST; September 6, 1952; 0626 GCT; 30°48.5'N, 117°07.5'W; sounding, 900 fm; wind, 030°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 20.44 | 33.46 | 5.21 | 440 | 0 | 20.44 | 33.46 | 5.21 | 23.49 | 440 | 0.00 |
| 10 | 20.45 | 33.49 | 5.32 | 438 | 10 | 20.45 | 33.49 | 5.32 | 23.51 | 438 | 0.04 |
| 20 | 16.37 | 33.33 | 6.42 | 354 | 20 | 16.37 | 33.33 | 6.42 | 24.40 | 354 | 0.08 |
| 35 | 11.94 | 33.33 | 5.85 | 266 | 30 | 13.10 | 33.33 | 6.19 | 25.10 | 287 | 0.12 |
| 54 | 10.04 | 33.51 | 3.89 | 220 | 50 | 10.28 | 33.45 | 3.97 | 25.72 | 229 | 0.17 |
| 69 | 9.60 | 33.57 | 3.73 | 209 | 75 | 9.62 | 33.66 | 3.50 | 25.99 | 202 | 0.22 |
| 83 | 9.64 | 33.80 | 3.00 | 192 | 100 | 9.40 | 33.85 | 2.88 | 26.17 | 185 | 0.27 |
| 108 | 9.25 | 33.87 | 2.84 | 181 | 150 | 8.57 | 33.98 | 2.67 | 26.41 | 163 | 0.36 |
| 159 | 8.49 | 34.00 | 2.61 | 160 | 200 | 8.27 | 34.09 | 1.97 | 26.54 | 150 | 0.44 |
| 210 | 8.20 | 34.11 | 1.87 | 148 | 250 | 7.88 | 34.17 | 1.64 | 26.66 | 139 | 0.51 |
| 265 | 7.76 | 34.20 | 1.55 | 135 | 300 | 7.52 | 34.24 | 0.93 | 26.77 | 129 | 0.58 |
| 311 | 7.43 | 34.25 | 0.80 | 127 | 400 | 6.80 | 34.28 | 0.57 | 26.90 | 116 | 0.71 |
| 420 | 6.66 | 34.29 | 0.54 | 114 | 500 | 6.19 | 34.32 | 0.45 | 27.01 | 105 | 0.83 |
| 527 | 6.03 | 34.33 | 0.42 | 103 | 600 | 5.75 | 34.37 | 0.36 | 27.11 | 96 | 0.94 |
| 634 | 5.65 | 34.38 | 0.33 | 95 | | | | | | | |
| **107.32** | CREST; September 6, 1952; 1840 GCT; 30°26'N, 116°11'W; sounding, 250 fm; wind, 340°, force 2; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | 16.36 | 33.37 | - | 351 | 0 | 16.36 | 33.37 | | 24.43 | 351 | 0.00 |
| 10 | 12.60 | 33.26 | 6.14 | 283 | 10 | 12.60 | 33.26 | 6.14 | 25.14 | 283 | 0.03 |
| 25 | 11.84 | 33.26 | 5.60 | 269 | 20 | 12.11 | 33.26 | 5.89 | 25.24 | 274 | 0.06 |
| 50 | 11.04 | 33.44 | 4.04 | 242 | 30 | 11.58 | 33.27 | 5.35 | 25.35 | 264 | 0.09 |
| 75 | 10.96 | 33.42 | 3.99 | 242 | 50 | 11.04 | 33.44 | 4.04 | 25.58 | 242 | 0.14 |
| 99 | 10.58 | 33.57 | 3.45 | 225 | 75 | 10.96 | 33.42 | 3.99 | 25.57 | 242 | 0.20 |
| 150 | 10.32 | 33.82 | 2.19 | 202 | 100 | 10.57 | 33.58 | 3.44 | 25.77 | 224 | 0.26 |
| 197 | 10.34 | 34.02 | 1.13 | 187 | 150 | 10.32 | 33.82 | 2.19 | 26.00 | 202 | 0.36 |
| 244 | 10.32 | 34.23 | 1.22 | 172 | 200 | 10.34 | 34.03 | 1.14 | 26.16 | 187 | 0.46 |
| 291 | 9.46 | 34.34 | 0.92 | 150 | 250 | 10.29 | 34.25 | 1.20 | 26.34 | 170 | 0.55 |
| 344 | 8.51 | 34.38 | 0.69 | 132 | 300 | 9.30 | 34.35 | 0.87 | 26.58 | 146 | 0.64 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

CREST; September 6, 1952; 2055 GCT; 30°20'N, 116°23'W; sounding, 900 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 21°. 107.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.20 | 33.35 | 5.93 | 418 | 0 | 19.20 | 33.35 | 5.93 | 23.73 | 418 | 0.00 |
| 9 | 15.80 | 33.24 | 6.39 | 348 | 10 | 15.60 | 33.24 | 6.43 | 24.51 | 344 | 0.04 |
| 18 | 13.61 | 33.21 | 6.51 | 306 | 20 | 13.50 | 33.21 | 6.50 | 24.93 | 304 | 0.07 |
| 32 | 12.82 | 33.24 | 6.31 | 288 | 30 | 13.03 | 33.23 | 6.36 | 25.04 | 293 | 0.10 |
| 51 | 11.26 | 33.31 | 4.83 | 255 | 50 | 11.29 | 33.31 | 4.85 | 25.43 | 256 | 0.16 |
| 65 | 11.00 | 33.38 | 4.20 | 246 | 75 | 10.61 | 33.48 | 3.60 | 25.68 | 232 | 0.22 |
| 79 | 10.56 | 33.53 | 3.40 | 227 | 100 | 10.46 | 33.73 | 2.38 | 25.90 | 211 | 0.27 |
| 102 | 10.44 | 33.75 | 2.27 | 209 | 150 | 10.39 | 34.14 | 0.75 | 26.23 | 179 | 0.37 |
| 151 | 10.39 | 34.14 | 0.75 | 179 | 200 | 10.67 | 34.34 | 0.88 | 26.34 | 169 | 0.46 |
| 200 | 10.67 | 34.34 | 0.88 | 169 | 250 | 9.62 | 34.27 | 1.35 | 26.47 | 157 | 0.54 |
| 254 | 9.56 | 34.27 | 1.38 | 156 | 300 | 9.63 | 34.38 | 0.71 | 26.55 | 149 | 0.62 |
| 299 | 9.64 | 34.38 | 0.72 | 149 | 400 | 8.31 | 34.40 | 0.41 | 26.78 | 128 | 0.77 |
| 405 | 8.23 | 34.40 | 0.39 | 127 | 500 | 6.94 | 34.35 | 0.34 | 26.94 | 113 | 0.90 |
| 508 | 6.85 | 34.34 | 0.34 | 112 | 600 | 6.09 | 34.31 | 0.30 | 27.02 | 105 | 1.01 |
| 617 | 6.00 | 34.31 | 0.30 | 104 | | | | | | | |

CREST; September 7, 1952; 0007 GCT; 30°11'N, 116°43'W; sounding, 1500 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 31°. 107.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.75 | 33.42 | 5.20 | 451 | 0 | 20.75 | 33.42 | 5.20 | 23.38 | 451 | 0.00 |
| 9 | 20.73 | 33.44 | 5.29 | 449 | 10 | 20.71 | 33.44 | 5.37 | 23.41 | 449 | 0.04 |
| 18 | 17.57 | 33.22 | 5.83 | 389 | 20 | 16.85 | 33.22 | 5.88 | 24.21 | 372 | 0.09 |
| 30 | 15.90 | 33.30 | 6.05 | 346 | 30 | 15.90 | 33.30 | 6.05 | 24.48 | 346 | 0.12 |
| 47 | 14.89 | 33.24 | 6.11 | 329 | 50 | 14.63 | 33.22 | 6.09 | 24.70 | 325 | 0.19 |
| 60 | 13.76 | 33.19 | 5.72 | 310 | 75 | 12.50 | 33.19 | 5.90 | 25.11 | 286 | 0.27 |
| 72 | 12.67 | 33.19 | 5.93 | 289 | 100 | 11.11 | 33.25 | 4.40 | 25.42 | 257 | 0.33 |
| 91 | 11.60 | 33.21 | 4.68 | 269 | 150 | 9.55 | 33.69 | 3.20 | 26.03 | 199 | 0.45 |
| 131 | 9.85 | 33.49 | 3.78 | 219 | 200 | 8.68 | 34.01 | 2.57 | 26.41 | 162 | 0.54 |
| 170 | 9.21 | 33.93 | 2.60 | 176 | 250 | 8.29 | 34.09 | 1.98 | 26.54 | 151 | 0.62 |
| 215 | 8.51 | 34.04 | 2.54 | 158 | 300 | 7.91 | 34.16 | 1.42 | 26.65 | 140 | 0.70 |
| 255 | 8.26 | 34.09 | 1.88 | 150 | 400 | 6.92 | 34.24 | 0.85 | 26.85 | 121 | 0.83 |
| 349 | 7.50 | 34.22 | 1.08 | 130 | 500 | 6.07 | 34.25 | 0.49 | 26.97 | 109 | 0.95 |
| 447 | 6.43 | 34.25 | 0.68 | 114 | | | | | | | |
| 548 | 5.84 | 34.25 | 0.33 | 106 | | | | | | | |

CREST; September 8, 1952; 0012 GCT; 29°50.5'N, 115°52.5'W; sounding, 38 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 06°. 110.33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.40 | 33.30 | 5.83 | 426 | 0 | 19.40 | 33.30 | 5.83 | 23.64 | 426 | 0.00 |
| 10 | 16.07 | 33.18 | 6.14 | 358 | 10 | 16.07 | 33.18 | 6.14 | 24.35 | 358 | 0.04 |
| 20 | 14.28 | 33.08 | 6.33 | 328 | 20 | 14.28 | 33.08 | 6.33 | 24.67 | 328 | 0.07 |
| 30 | 13.83 | 33.17 | 6.47 | 313 | 30 | 13.83 | 33.17 | 6.47 | 24.83 | 313 | 0.11 |
| 50 | 11.51 | 33.22 | 5.44 | 266 | 50 | 11.51 | 33.22 | 5.44 | 25.32 | 266 | 0.16 |

CREST; September 7, 1952; 2211 GCT; 29°46.5'N, 116°00'W; sounding, 840 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 25°. 110.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.46 | 33.37 | - | 447 | 0 | 20.46 | 33.37 | | 23.42 | 447 | 0.00 |
| 9 | 19.56 | 33.35 | 5.81 | 426 | 10 | 19.55 | 33.35 | 5.82 | 23.64 | 426 | 0.04 |
| 18 | 16.58 | 33.17 | 6.12 | 370 | 20 | 18.00 | 33.17 | 6.13 | 23.89 | 402 | 0.09 |
| 32 | 14.90 | 33.17 | 6.15 | 334 | 30 | 15.48 | 33.17 | 6.15 | 24.48 | 346 | 0.12 |
| 49 | 13.30 | 33.10 | 6.18 | 308 | 50 | 13.26 | 33.10 | 6.18 | 24.89 | 307 | 0.19 |
| 62 | 12.53 | 33.13 | 6.06 | 291 | 75 | 11.50 | 33.24 | 5.96 | 25.34 | 265 | 0.26 |
| 75 | 11.50 | 33.24 | 5.96 | 265 | 100 | 10.31 | 33.42 | 4.68 | 25.69 | 231 | 0.32 |
| 96 | 10.40 | 33.39 | 4.79 | 235 | 150 | 9.48 | 33.80 | 3.82 | 26.12 | 190 | 0.43 |
| 140 | 9.46 | 33.71 | 4.02 | 196 | 200 | 9.53 | 34.20 | 2.00 | 26.43 | 161 | 0.52 |
| 184 | 9.64 | 34.11 | 2.26 | 169 | 250 | 9.13 | 34.28 | 1.46 | 26.55 | 149 | 0.60 |
| 233 | 9.23 | 34.27 | 1.64 | 151 | 300 | 8.65 | 34.29 | 0.99 | 26.64 | 141 | 0.67 |
| 274 | 8.95 | 34.29 | 1.19 | 145 | 400 | 7.72 | 34.36 | 0.43 | 26.83 | 122 | 0.81 |
| 373 | 7.89 | 34.33 | 0.54 | 127 | 500 | 6.97 | 34.40 | 0.28 | 26.97 | 109 | 0.93 |
| 473 | 7.19 | 34.40 | 0.27 | 112 | | | | | | | |
| 578 | 6.30 | 34.40 | 0.30 | 101 | | | | | | | |

SIO

CCOFI 5209

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

**110.40** CREST; September 7, 1952; 1903 GCT; 29°34.5'N, 116°21.5'W; sounding, 1150 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.00 | 33.42 | 5.33 | 457 | 0 | 21.00 | 33.42 | 5.33 | 23.31 | 457 | 0.00 |
| 10 | 20.86 | 33.42 | 5.23 | 454 | 10 | 20.86 | 33.42 | 5.23 | 23.35 | 454 | 0.05 |
| 20 | 20.60 | 33.44 | 5.30 | 446 | 20 | 20.60 | 33.44 | 5.30 | 23.44 | 446 | 0.09 |
| 34 | 17.08 | 33.15 | 5.84 | 383 | 30 | 17.80 | 33.30 | 5.67 | 24.04 | 388 | 0.13 |
| 54 | 14.17 | 33.10 | 6.30 | 325 | 50 | 14.50 | 33.10 | 6.26 | 24.64 | 331 | 0.20 |
| 68 | 13.13 | 33.13 | 6.27 | 302 | 75 | 12.70 | 33.20 | 6.05 | 25.08 | 289 | 0.28 |
| 83 | 12.11 | 33.28 | 5.18 | 272 | 100 | 11.22 | 33.42 | 4.51 | 25.53 | 247 | 0.35 |
| 107 | 10.92 | 33.46 | 4.28 | 238 | 150 | 10.40 | 33.98 | 2.01 | 26.11 | 191 | 0.46 |
| 158 | 10.48 | 34.05 | 1.93 | 188 | 200 | 9.76 | 34.17 | 1.78 | 26.36 | 167 | 0.55 |
| 209 | 9.50 | 34.18 | 1.74 | 162 | 250 | 8.67 | 34.21 | 1.50 | 26.57 | 147 | 0.63 |
| 263 | 8.60 | 34.22 | 1.40 | 145 | 300 | 8.57 | 34.30 | 0.86 | 26.66 | 139 | 0.71 |
| 310 | 8.56 | 34.31 | 0.75 | 138 | 400 | 7.89 | 34.34 | 0.43 | 26.79 | 126 | 0.85 |
| 416 | 7.71 | 34.34 | 0.40 | 124 | 500 | 6.78 | 34.31 | 0.37 | 26.93 | 114 | 0.97 |
| 521 | 6.59 | 34.31 | 0.36 | 111 | 600 | 6.02 | 34.31 | 0.28 | 27.03 | 104 | 1.09 |
| 627 | 5.87 | 34.31 | 0.25 | 102 | | | | | | | |

**110.50** CREST; September 7, 1952; 1435 GCT; 29°17.5'N, 117°02.5'W; sounding, 1750 fm; wind, 340°, force 4; weather, clear; sea, very rough; wire angle, 24°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.22 | 33.46 | 5.46 | 460 | 0 | 21.22 | 33.46 | 5.46 | 23.28 | 460 | 0.00 |
| 9 | 21.10 | 33.46 | 5.33 | 457 | 10 | 21.06 | 33.46 | 5.35 | 23.33 | 456 | 0.05 |
| 23 | 17.49 | 33.26 | 5.96 | 384 | 20 | 17.78 | 33.26 | 5.92 | 24.02 | 390 | 0.09 |
| 50 | 15.91 | 33.37 | 6.15 | 341 | 30 | 17.18 | 33.27 | 5.98 | 24.17 | 376 | 0.13 |
| 74 | 14.31 | 33.30 | 6.33 | 313 | 50 | 15.91 | 33.37 | 6.15 | 24.54 | 341 | 0.20 |
| 100 | 12.47 | 33.31 | 5.54 | 277 | 75 | 14.19 | 33.30 | 6.33 | 24.86 | 310 | 0.28 |
| 148 | 9.73 | 33.49 | 4.54 | 217 | 100 | 12.47 | 33.31 | 5.54 | 25.21 | 277 | 0.35 |
| 194 | 8.92 | 33.87 | 3.05 | 176 | 150 | 9.68 | 33.50 | 4.50 | 25.86 | 215 | 0.48 |
| 287 | 8.42 | 34.23 | 1.35 | 142 | 200 | 8.95 | 33.92 | 2.90 | 26.30 | 173 | 0.58 |
| 384 | 7.27 | 34.25 | 0.84 | 125 | 250 | 9.16 | 34.15 | 1.80 | 26.45 | 159 | 0.66 |
| 478 | 7.01 | 34.31 | 0.53 | 117 | 300 | 8.17 | 34.24 | 1.23 | 26.67 | 138 | 0.74 |
| 572 | 6.28 | 34.36 | 0.24 | 104 | 400 | 7.21 | 34.26 | 0.79 | 26.83 | 123 | 0.88 |
| 760 | 4.92 | 34.38 | 0.35 | 86 | 500 | 6.85 | 34.33 | 0.47 | 26.93 | 113 | 1.00 |
| 957 | 4.34 | 34.40 | 0.51 | 79 | 600 | 6.03 | 34.37 | 0.25 | 27.07 | 100 | 1.11 |
| 1149 | 3.81 | 34.45 | 0.70 | 70 | 700 | 5.26 | 34.38 | 0.29 | 27.18 | 90 | 1.22 |
| | | | | | 800 | 4.81 | 34.38 | 0.38 | 27.23 | 85 | 1.31 |
| | | | | | 1000 | 4.22 | 34.41 | 0.55 | 27.32 | 77 | 1.49 |

**110.60** CREST; September 7, 1952; 0842 GCT; 28°59'N, 117°45'W; sounding, 1830 fm; wind, 280°, force 4; weather, partly cloudy; sea, rough; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.26 | 33.49 | 5.65 | 459 | 0 | 21.26 | 33.49 | 5.65 | 23.30 | 459 | 0.00 |
| 8 | 21.28 | 33.50 | 5.21 | 459 | 10 | 21.28 | 33.50 | 5.22 | 23.30 | 459 | 0.05 |
| 18 | 21.28 | 33.51 | 5.30 | 458 | 20 | 21.28 | 33.51 | 5.33 | 23.31 | 458 | 0.09 |
| 30 | 20.18 | 33.44 | 5.51 | 435 | 30 | 20.18 | 33.44 | 5.51 | 23.55 | 435 | 0.14 |
| 48 | 15.64 | 33.33 | 6.38 | 338 | 50 | 15.10 | 33.33 | 6.35 | 24.68 | 327 | 0.21 |
| 60 | 13.84 | 33.37 | 6.27 | 298 | 75 | 12.80 | 33.36 | 5.85 | 25.18 | 279 | 0.29 |
| 72 | 13.12 | 33.35 | 5.91 | 286 | 100 | 10.74 | 33.66 | 5.47 | 25.80 | 221 | 0.35 |
| 90 | 11.07 | 33.51 | 5.68 | 237 | 150 | 9.50 | 34.02 | 2.54 | 26.29 | 174 | 0.45 |
| 126 | 10.00 | 33.96 | 3.97 | 186 | 200 | 8.58 | 34.10 | 2.60 | 26.50 | 154 | 0.54 |
| 163 | 9.20 | 34.05 | 2.42 | 167 | 250 | 8.55 | 34.26 | 1.69 | 26.63 | 142 | 0.61 |
| 206 | 8.56 | 34.11 | 2.61 | 153 | 300 | 8.15 | 34.31 | 1.21 | 26.73 | 132 | 0.68 |
| 243 | 8.58 | 34.25 | 1.80 | 143 | 400 | 7.59 | 34.35 | 0.67 | 26.84 | 121 | 0.82 |
| 334 | 7.91 | 34.33 | 0.98 | 127 | 500 | 6.72 | 34.34 | 0.34 | 26.96 | 111 | 0.94 |
| 535 | 6.34 | 34.34 | 0.27 | 106 | | | | | | | |

**113.30** CREST; September 8, 1952; 0433 GCT; 29°22.5'N, 115°17.5'W; sounding, 30 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 00°.[a)]

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.54 | 33.54 | 5.73 | 412 | 0 | 19.54 | 33.54 | 5.73 | 23.79 | 412 | 0.00 |
| 10 | 15.90 | 33.48 | 6.28 | 333 | 10 | 15.90 | 33.48 | 6.28 | 24.62 | 333 | 0.04 |
| 20 | 12.86 | 33.53 | 5.11 | 268 | 20 | 12.86 | 33.53 | 5.11 | 25.30 | 268 | 0.07 |
| 30 | 11.62 | 33.57 | 3.91 | 242 | 30 | 11.62 | 33.57 | 3.91 | 25.57 | 242 | 0.09 |

a) Stations 113.30, 117.26, 117.30, 117.40, 120.25, 120.30 and 120.35 were occupied also by RV Black Douglas during a special current study in Sebastián Vizcaino Bay. Data collected on these stations are presented at the end of CCOFI Cruise 5209 on pages 327 to 330.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; September 8, 1952; 0908 GCT; 29°02'N, 115°58.5'W; sounding, 850 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 17°. | | | | | | | | | | | 113.40 |
| 0 | 21.13 | 33.45 | 5.26 | 459 | 0 | 21.13 | 33.45 | 5.26 | 23.30 | 459 | 0.00 |
| 9 | 21.13 | 33.44 | 5.26 | 459 | 10 | 21.12 | 33.44 | 5.25 | 23.30 | 459 | 0.05 |
| 19 | 18.81 | 33.51 | 5.89 | 396 | 20 | 18.78 | 33.51 | 5.90 | 23.96 | 396 | 0.09 |
| 33 | 15.92 | 33.30 | 6.09 | 346 | 30 | 16.43 | 33.31 | 6.08 | 24.37 | 357 | 0.13 |
| 52 | 12.67 | 33.30 | 5.68 | 281 | 50 | 12.82 | 33.30 | 5.82 | 25.13 | 284 | 0.19 |
| 67 | 11.90 | 33.33 | 5.26 | 265 | 75 | 11.71 | 33.37 | 4.70 | 25.40 | 259 | 0.26 |
| 81 | 11.56 | 33.46 | 4.13 | 249 | 100 | 10.67 | 33.72 | 3.28 | 25.86 | 215 | 0.32 |
| 104 | 10.62 | 33.77 | 3.11 | 211 | 150 | 11.54 | 34.30 | 1.25 | 26.15 | 187 | 0.42 |
| 153 | 11.55 | 34.31 | 1.21 | 187 | 200 | 11.00 | 34.38 | 0.89 | 26.31 | 172 | 0.51 |
| 201 | 10.99 | 34.38 | 0.88 | 172 | 250 | 10.74 | 34.53 | 0.33 | 26.48 | 156 | 0.60 |
| 254 | 10.71 | 34.54 | 0.30 | 155 | 300 | 9.98 | 34.51 | 0.36 | 26.59 | 145 | 0.68 |
| 298 | 10.04 | 34.51 | 0.35 | 146 | 400 | 7.87 | 34.33 | 0.67 | 26.79 | 127 | 0.82 |
| 400 | 7.87 | 34.33 | 0.67 | 127 | 500 | 6.69 | 34.29 | 0.50 | 26.92 | 114 | 0.95 |
| 502 | 6.66 | 34.29 | 0.51 | 114 | 600 | 5.94 | 34.33 | 0.38 | 27.05 | 102 | 1.06 |
| 607 | 5.91 | 34.33 | 0.37 | 101 | | | | | | | |
| CREST; September 8, 1952; 2024 GCT; 28°56'N, 114°41'W; sounding, 45 fm; wind, 260°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | 117.26 |
| 0 | 22.10 | 33.58 | 5.78 | 475 | 0 | 22.10 | 33.58 | 5.78 | 23.13 | 475 | 0.00 |
| 10 | 19.99 | 33.44 | 6.01 | 430 | 10 | 19.99 | 33.44 | 6.01 | 23.60 | 430 | 0.05 |
| 20 | 15.22 | 33.42 | 6.57 | 323 | 20 | 15.22 | 33.42 | 6.57 | 24.73 | 323 | 0.08 |
| 30 | 12.44 | 33.27 | 5.67 | 279 | 30 | 12.44 | 33.27 | 5.67 | 25.18 | 279 | 0.11 |
| 50 | 11.14 | 33.71 | 2.47 | 224 | 50 | 11.14 | 33.71 | 2.47 | 25.77 | 224 | 0.16 |
| CREST; September 8, 1952; 1835 GCT; 28°49'N, 114°57'W; sounding, 53 fm; wind, 300°, force 2; weather, partly cloudy; sea, slight; wire angle, 05°. | | | | | | | | | | | 117.30 |
| 0 | 18.38 | 33.28 | 5.95 | 403 | 0 | 18.38 | 33.28 | 5.95 | 23.88 | 403 | 0.00 |
| 10 | 17.85 | 33.28 | 5.97 | 391 | 10 | 17.85 | 33.28 | 5.97 | 24.01 | 391 | 0.04 |
| 20 | 15.71 | 33.22 | 6.23 | 348 | 20 | 15.71 | 33.22 | 6.23 | 24.47 | 348 | 0.08 |
| 30 | 14.40 | 33.26 | 6.27 | 318 | 30 | 14.40 | 33.26 | 6.27 | 24.78 | 318 | 0.11 |
| 50 | 12.78 | 33.22 | 5.94 | 289 | 50 | 12.78 | 33.22 | 5.94 | 25.08 | 289 | 0.17 |
| CREST; September 8, 1952; 1405 GCT; 28°28'N, 115°35.5'W; sounding, 550 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 07°. | | | | | | | | | | | 117.40 |
| 0 | 20.50 | 33.35 | 5.34 | 450 | 0 | 20.50 | 33.35 | 5.34 | 23.39 | 450 | 0.00 |
| 10 | 20.07 | 33.40 | 5.93 | 435 | 10 | 20.07 | 33.40 | 5.93 | 23.55 | 435 | 0.04 |
| 20 | 18.09 | 33.35 | 6.51 | 391 | 20 | 18.09 | 33.35 | 6.51 | 24.01 | 391 | 0.09 |
| 35 | 16.12 | 33.28 | 6.20 | 352 | 30 | 17.08 | 33.30 | 6.23 | 24.21 | 372 | 0.12 |
| 50 | 13.74 | 33.22 | 6.62 | 307 | 50 | 13.74 | 33.22 | 6.62 | 24.89 | 307 | 0.19 |
| 64 | 13.58 | 33.26 | 6.30 | 301 | 75 | 12.80 | 33.27 | 5.84 | 25.11 | 286 | 0.27 |
| 78 | 12.51 | 33.28 | 5.68 | 280 | 100 | 11.59 | 33.63 | 3.86 | 25.62 | 237 | 0.33 |
| 97 | 11.59 | 33.55 | 4.08 | 243 | 150 | 11.55 | 34.16 | 1.33 | 26.04 | 198 | 0.44 |
| 149 | 11.56 | 34.16 | 1.34 | 198 | 200 | 11.27 | 34.30 | 0.91 | 26.20 | 182 | 0.54 |
| 194 | 11.28 | 34.29 | 0.95 | 183 | 250 | 11.06 | 34.44 | 0.63 | 26.35 | 169 | 0.63 |
| 240 | 11.16 | 34.43 | 0.61 | 171 | 300 | 10.00 | 34.44 | 0.70 | 26.53 | 151 | 0.71 |
| 288 | 10.34 | 34.45 | 0.72 | 156 | 400 | 8.00 | 34.33 | 0.50 | 26.77 | 129 | 0.86 |
| 389 | 8.10 | 34.33 | 0.52 | 130 | 500 | 7.03 | 34.33 | 0.42 | 26.91 | 115 | 0.99 |
| 480 | 7.28 | 34.33 | 0.46 | 119 | 600 | (5.92) | (34.33) | | (27.06) | (101) | (1.10) |
| 584 | 6.08 | 34.33 | 0.31 | 103 | | | | | | | |
| CREST; September 9, 1952; 0450 GCT; 28°23'N, 114°14.5'W; sounding, 30 fm; wind, 290°, force 3; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | | 120.25 |
| 0 | 21.12 | 33.46 | 5.68 | 458 | 0 | 21.12 | 33.46 | 5.68 | 23.31 | 458 | 0.00 |
| 10 | 18.97 | 33.44 | 5.97 | 405 | 10 | 18.97 | 33.44 | 5.97 | 23.86 | 405 | 0.04 |
| 20 | 15.31 | 33.35 | 6.69 | 330 | 20 | 15.31 | 33.35 | 6.69 | 24.65 | 330 | 0.08 |
| 30 | 14.20 | 33.22 | 6.60 | 316 | 30 | 14.20 | 33.22 | 6.60 | 24.79 | 316 | 0.11 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **120.30** | CREST; September 9, 1952; 0740, 0752 GCT; 28°13'N, 114°34'W; sounding, 47 fm; wind, 310°, force 4; weather, clear; sea, moderate; wire angle, 18°, 18°. | | | | | | | | | | |
| 0 | 21.13 | 33.55 | 5.48 | 451 | 0 | 21.13 | 33.55 | 5.48 | 23.38 | 451 | 0.00 |
| 9 | 21.09 | 33.49 | 5.48 | 455 | 10 | 21.05 | 33.49 | 5.49 | 23.35 | 454 | 0.05 |
| 18 | 20.63 | 33.48 | 5.57 | 444 | 20 | 20.45 | 33.48 | 5.61 | 23.51 | 439 | 0.09 |
| 28 | 19.62 | 33.44 | 5.77 | 421 | 30 | 19.42 | 33.42 | 5.74 | 23.73 | 418 | 0.13 |
| 47 | 15.35 | 33.21 | 5.61 | 341 | 50 | 14.71 | 33.22 | 5.62 | 24.68 | 327 | 0.21 |
| 71 | 12.80 | 33.31 | 5.93 | 283 | | | | | | | |
| **120.35** | CREST; September 9, 1952; 1122 GCT; 28°02'N, 114°58'W; sounding, 42 fm; wind, 340°, force 1; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | - | 33.49 | 5.60 | | 0 | 21.1 | 33.49 | 5.60 | 23.34 | 455 | 0.00 |
| 10 | 21.07 | 33.48 | 5.65 | 455 | 10 | 21.07 | 33.48 | 5.65 | 23.34 | 455 | 0.05 |
| 20 | 20.30 | 33.46 | 5.75 | 437 | 20 | 20.30 | 33.46 | 5.75 | 23.53 | 437 | 0.09 |
| 30 | 17.48 | 33.24 | 6.27 | 385 | 30 | 17.48 | 33.24 | 6.27 | 24.07 | 385 | 0.13 |
| 50 | 12.80 | 33.19 | 6.46 | 292 | 50 | 12.80 | 33.19 | 6.46 | 25.05 | 292 | 0.20 |
| **120.45** | CREST; September 10, 1952; 0013 GCT; 27°43'N, 115°33'W; sounding, 1450 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 21.30 | 33.49 | 5.45 | 460 | 0 | 21.30 | 33.49 | 5.45 | 23.29 | 460 | 0.00 |
| 9 | 21.30 | 33.49 | 5.56 | 460 | 10 | 21.30 | 33.49 | 5.60 | 23.29 | 460 | 0.05 |
| 23 | 18.57 | 33.46 | 6.31 | 394 | 20 | 19.60 | 33.47 | 6.28 | 23.72 | 419 | 0.09 |
| 51 | 13.54 | 33.31 | 5.89 | 297 | 30 | 17.22 | 33.42 | 6.27 | 24.27 | 366 | 0.13 |
| 92 | 10.88 | 33.46 | 4.50 | 238 | 50 | 13.79 | 33.31 | 5.90 | 24.95 | 302 | 0.20 |
| 103 | 10.48 | 33.64 | 4.30 | 218 | 75 | 11.70 | 33.37 | 5.00 | 25.40 | 259 | 0.27 |
| 154 | 9.65 | 34.02 | 2.77 | 176 | 100 | 10.59 | 33.58 | 4.37 | 25.76 | 224 | 0.33 |
| 204 | 9.70 | 34.27 | - | 159 | 150 | 9.66 | 34.00 | 2.89 | 26.25 | 178 | 0.43 |
| 305 | 8.82 | 34.33 | 0.80 | 141 | 200 | 9.70 | 34.26 | | 26.44 | 159 | 0.52 |
| 410 | 7.66 | 34.30 | - | 126 | 250 | 9.40 | 34.31 | | 26.53 | 151 | 0.60 |
| 510 | 6.97 | 34.34 | 0.31 | 114 | 300 | 8.89 | 34.33 | 0.82 | 26.63 | 142 | 0.67 |
| 610 | 6.16 | 34.34 | 0.33 | 104 | 400 | 7.73 | 34.30 | | 26.78 | 127 | 0.81 |
| 809 | 4.79 | 34.37 | 0.48 | 86 | 500 | 7.04 | 34.34 | 0.31 | 26.91 | 115 | 0.94 |
| 1012 | 3.96 | 34.45 | 0.61 | 71 | 600 | 6.24 | 34.34 | 0.32 | 27.02 | 105 | 1.06 |
| 1212 | 3.52 | 34.49 | 0.90 | 64 | 700 | 5.45 | 34.34 | 0.39 | 27.12 | 95 | 1.17 |
| | | | | | 800 | 4.84 | 34.37 | 0.46 | 27.22 | 86 | 1.26 |
| | | | | | 1000 | 4.00 | 34.45 | 0.60 | 27.37 | 72 | 1.44 |
| **120.50** | CREST; September 10, 1952; 0351 GCT; 27°32.5'N, 115°53'W; sounding, 1850 fm; wind, 350°, force 5; weather, clear; sea, very rough; wire angle, 33°. | | | | | | | | | | |
| 0 | 22.76 | 33.58 | 5.17 | 492 | 0 | 22.76 | 33.58 | 5.17 | 22.95 | 492 | 0.00 |
| 8 | 22.75 | 33.59 | 5.13 | 491 | 10 | 22.74 | 33.59 | 5.15 | 22.96 | 491 | 0.05 |
| 17 | 18.65 | 33.49 | 6.03 | 394 | 20 | 16.71 | 33.45 | 6.30 | 24.41 | 352 | 0.09 |
| 29 | 13.70 | 33.42 | 6.51 | 292 | 30 | 13.66 | 33.42 | 6.50 | 25.06 | 291 | 0.12 |
| 46 | 12.58 | 33.58 | 3.64 | 259 | 50 | 12.30 | 33.58 | 3.56 | 25.45 | 254 | 0.18 |
| 59 | 11.50 | 33.57 | 3.47 | 240 | 75 | 10.70 | 33.59 | 3.42 | 25.75 | 225 | 0.24 |
| 70 | 10.73 | 33.58 | 3.45 | 226 | 100 | 10.59 | 33.92 | 2.21 | 26.03 | 199 | 0.29 |
| 91 | 10.66 | 33.84 | 2.48 | 206 | 150 | 9.97 | 34.18 | 1.53 | 26.34 | 170 | 0.39 |
| 132 | 10.22 | 34.13 | 1.76 | 177 | 200 | 9.23 | 34.29 | 1.08 | 26.55 | 150 | 0.47 |
| 171 | 9.64 | 34.23 | 1.29 | 161 | 250 | 8.92 | 34.33 | 0.65 | 26.63 | 142 | 0.54 |
| 215 | 9.10 | 34.31 | 0.98 | 146 | 300 | 8.53 | 34.34 | 0.40 | 26.70 | 136 | 0.61 |
| 253 | 8.90 | 34.33 | 0.62 | 142 | 400 | 7.76 | 34.37 | 0.21 | 26.84 | 122 | 0.75 |
| 346 | 8.14 | 34.36 | 0.25 | 128 | 500 | 6.88 | 34.37 | 0.20 | 26.96 | 110 | 0.87 |
| 444 | 7.42 | 34.38 | 0.21 | 117 | | | | | | | |
| 547 | 6.44 | 34.36 | 0.19 | 106 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; September 10, 1952; 0931 GCT; 27°13'N, 116°32'W; sounding, 2000 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 23°. 120.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.28 | 33.48 | 5.32 | 487 | 0 | 22.28 | 33.48 | 5.32 | 23.01 | 487 | 0.00 |
| 9 | 22.22 | 33.44 | 5.26 | 488 | 10 | 22.22 | 33.44 | 5.26 | 22.99 | 488 | 0.05 |
| 28 | 13.56 | 33.37 | 5.91 | 293 | 20 | 18.20 | 33.38 | 5.84 | 24.00 | 392 | 0.09 |
| 55 | 11.26 | 33.48 | 3.94 | 243 | 30 | 13.07 | 33.37 | 5.89 | 25.14 | 284 | 0.13 |
| 83 | 10.26 | 33.57 | 3.53 | 219 | 50 | 11.50 | 33.44 | 4.28 | 25.49 | 250 | 0.18 |
| 110 | 9.55 | 33.82 | 3.07 | 190 | 75 | 10.38 | 33.55 | 3.62 | 25.78 | 223 | 0.24 |
| 166 | 10.14 | 34.33 | 1.14 | 161 | 100 | 9.99 | 33.68 | 3.24 | 25.94 | 207 | 0.29 |
| 220 | 8.80 | 34.18 | 1.32 | 151 | 150 | 9.81 | 34.20 | 1.50 | 26.38 | 166 | 0.39 |
| 327 | 7.84 | 34.33 | 0.45 | 126 | 200 | 9.80 | 34.31 | 1.23 | 26.47 | 157 | 0.47 |
| 431 | 7.02 | 34.34 | 0.25 | 115 | 250 | 8.44 | 34.21 | 1.20 | 26.61 | 144 | 0.55 |
| 540 | 5.86 | 34.34 | 0.25 | 100 | 300 | 8.04 | 34.31 | 0.67 | 26.75 | 131 | 0.62 |
| 644 | 5.36 | 34.37 | 0.25 | 92 | 400 | 7.32 | 34.34 | 0.28 | 26.88 | 118 | 0.75 |
| 859 | 4.49 | 34.42 | 0.48 | 79 | 500 | 6.24 | 34.34 | 0.25 | 27.02 | 105 | 0.87 |
| 1072 | 3.84 | 34.49 | 0.66 | 67 | 600 | 5.56 | 34.35 | 0.25 | 27.12 | 96 | 0.97 |
| 1279 | 3.34 | 34.51 | 0.96 | 61 | 700 | 5.08 | 34.39 | 0.28 | 27.20 | 87 | 1.07 |
| | | | | | 800 | 4.68 | 34.41 | 0.38 | 27.27 | 81 | 1.17 |
| | | | | | 1000 | 4.05 | 34.46 | 0.62 | 27.37 | 71 | 1.34 |

CREST; September 10, 1952; 1500 GCT; 26°52'N, 117°10.5'W; sounding, 2000 fm; wind, 350°, force 5; weather, cloudy; sea, rough; wire angle, 22°. 120.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.60 | 33.42 | 5.21 | 473 | 0 | 21.60 | 33.42 | 5.21 | 23.15 | 473 | 0.00 |
| 8 | 21.60 | 33.44 | 5.17 | 472 | 10 | 21.59 | 33.44 | 5.17 | 23.17 | 471 | 0.05 |
| 18 | 20.40 | 33.37 | 5.43 | 446 | 20 | 19.29 | 33.34 | 5.60 | 23.70 | 420 | 0.09 |
| 32 | 16.01 | 33.22 | 6.22 | 354 | 30 | 16.69 | 33.24 | 6.23 | 24.26 | 367 | 0.13 |
| 51 | 13.94 | 33.13 | 6.25 | 318 | 50 | 14.05 | 33.13 | 6.24 | 24.75 | 320 | 0.20 |
| 64 | 12.49 | 33.21 | 5.76 | 285 | 75 | 11.29 | 33.36 | 4.76 | 25.47 | 252 | 0.27 |
| 78 | 11.14 | 33.39 | 4.55 | 247 | 100 | 10.58 | 33.71 | 3.14 | 25.87 | 214 | 0.33 |
| 100 | 10.58 | 33.71 | 3.14 | 214 | 150 | 10.83 | 34.27 | 1.08 | 26.26 | 177 | 0.43 |
| 146 | 10.84 | 34.25 | 1.13 | 179 | 200 | 10.52 | 34.42 | 0.72 | 26.43 | 161 | 0.52 |
| 191 | 10.57 | 34.40 | 0.77 | 163 | 250 | 10.12 | 34.45 | 0.55 | 26.52 | 152 | 0.60 |
| 244 | 10.20 | 34.45 | 0.56 | 153 | 300 | 9.38 | 34.44 | 0.60 | 26.64 | 141 | 0.67 |
| 287 | 9.52 | 34.45 | 0.61 | 142 | 400 | 8.13 | 34.39 | 0.33 | 26.80 | 126 | 0.81 |
| 386 | 8.33 | 34.40 | 0.34 | 128 | 500 | 6.87 | 34.36 | 0.30 | 26.95 | 111 | 0.94 |
| 485 | 7.02 | 34.36 | 0.30 | 113 | 600 | (6.12) | (34.36) | (0.34) | (27.05) | (102) | (1.05) |
| 590 | 6.18 | 34.36 | 0.33 | 102 | | | | | | | |

CREST; September 10, 1952; 2030 GCT; 26°32'N, 117°49'W; sounding, 2000 fm; wind, 350°, force 5; weather, cloudy; sea, rough; wire angle, 30°. 120.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.86 | 33.41 | 4.95 | 481 | 0 | 21.86 | 33.41 | 4.95 | 23.07 | 481 | 0.00 |
| 8 | 21.84 | 33.42 | 5.09 | 479 | 10 | 21.83 | 33.42 | 5.30 | 23.09 | 479 | 0.05 |
| 22 | 19.00 | 33.37 | 5.71 | 411 | 20 | 20.86 | 33.37 | 5.67 | 23.31 | 457 | 0.09 |
| 48 | 16.16 | 33.37 | 5.93 | 346 | 30 | 17.45 | 33.37 | 5.82 | 24.18 | 375 | 0.14 |
| 70 | 15.20 | 33.40 | 5.86 | 324 | 50 | 16.08 | 33.37 | 5.92 | 24.50 | 345 | 0.21 |
| 95 | 13.02 | 33.30 | 5.52 | 288 | 75 | 14.70 | 33.39 | 5.79 | 24.82 | 314 | 0.29 |
| 143 | 10.74 | 33.58 | 3.87 | 227 | 100 | 12.75 | 33.31 | 5.40 | 25.15 | 282 | 0.37 |
| 190 | 9.60 | 33.89 | 3.43 | 185 | 150 | 10.53 | 33.63 | 3.78 | 25.81 | 219 | 0.49 |
| 281 | 8.41 | 34.20 | 1.56 | 144 | 200 | 9.45 | 33.93 | 3.34 | 26.23 | 180 | 0.59 |
| 377 | 7.54 | 34.31 | 0.71 | 124 | 250 | 8.78 | 34.11 | 2.32 | 26.48 | 156 | 0.68 |
| 470 | 6.78 | 34.38 | 0.36 | 108 | 300 | 8.24 | 34.23 | 1.29 | 26.65 | 139 | 0.76 |
| 564 | 6.04 | 34.38 | 0.22 | 99 | 400 | 7.35 | 34.33 | 0.60 | 26.86 | 120 | 0.89 |
| 751 | 5.04 | 34.45 | 0.33 | 82 | 500 | 6.54 | 34.38 | 0.29 | 27.01 | 105 | 1.01 |
| 944 | 4.22 | 34.47 | 0.50 | 72 | 600 | 5.83 | 34.39 | 0.23 | 27.11 | 96 | 1.12 |
| 1136 | 3.70 | 34.51 | 0.74 | 64 | 700 | 5.29 | 34.43 | 0.28 | 27.21 | 87 | 1.22 |
| | | | | | 800 | 4.82 | 34.46 | 0.37 | 27.29 | 79 | 1.31 |
| | | | | | 1000 | 4.04 | 34.47 | 0.56 | 27.38 | 70 | 1.48 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

120.90 CREST; September 11, 1952; 0206 GCT; 26°13'N, 118°28'W; sounding, 2000 fm; wind, 010°, force 5; weather, cloudy; sea, very rough; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.0 | 33.84 | 5.02 | 480 | 0 | 23.0 | 33.84 | 5.02 | 23.08 | 480 | 0.00 |
| 8 | 23.04 | 33.80 | 5.20 | 484 | 10 | 23.04 | 33.81 | 5.20 | 23.04 | 483 | 0.05 |
| 17 | 23.03 | 33.82 | 5.04 | 482 | 20 | 23.03 | 33.81 | 5.06 | 23.05 | 483 | 0.10 |
| 30 | 20.99 | 33.73 | 5.42 | 435 | 30 | 20.99 | 33.73 | 5.42 | 23.55 | 435 | 0.14 |
| 48 | 18.66 | 33.62 | 5.80 | 385 | 50 | 18.30 | 33.63 | 5.86 | 24.17 | 376 | 0.22 |
| 61 | 17.19 | 33.64 | 5.95 | 349 | 75 | 16.42 | 33.55 | 5.90 | 24.56 | 339 | 0.31 |
| 74 | 16.48 | 33.57 | 5.91 | 339 | 100 | 15.29 | 33.51 | 5.64 | 24.78 | 318 | 0.40 |
| 94 | 15.67 | 33.51 | 5.73 | 326 | | | | | | | |
| 136 | 11.58 | 33.51 | 4.47 | 246 | | | | | | | |

123.37 CREST; September 12, 1952; 0320 GCT; 27°21'N, 114°40'W; sounding, 35 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.64 | 33.75 | 5.57 | 375 | 0 | 18.64 | 33.75 | 5.57 | 24.18 | 375 | 0.00 |
| 10 | 18.58 | 33.77 | 5.59 | 372 | 10 | 18.58 | 33.77 | 5.59 | 24.21 | 372 | 0.04 |
| 20 | 16.90 | 33.86 | 4.31 | 327 | 20 | 16.90 | 33.86 | 4.31 | 24.68 | 327 | 0.07 |
| 30 | 16.15 | 33.82 | 4.04 | 313 | 30 | 16.15 | 33.82 | 4.04 | 24.83 | 313 | 0.10 |

123.40 CREST; September 12, 1952; 0138 GCT; 27°15'N, 114°47'W; sounding, 200 fm; wind, 320°, force 6; weather, clear; sea, rough; wire angle, 35°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.58 | 33.71 | 5.68 | 376 | 0 | 18.58 | 33.71 | 5.68 | 24.16 | 376 | 0.00 |
| 8 | 18.45 | 33.71 | 5.67 | 373 | 10 | 18.40 | 33.71 | 5.66 | 24.21 | 372 | 0.04 |
| 21 | 16.00 | 33.68 | 4.71 | 320 | 20 | 16.20 | 33.68 | 5.00 | 24.71 | 325 | 0.07 |
| 42 | 14.54 | 33.93 | 2.69 | 271 | 30 | 15.03 | 33.73 | 3.56 | 25.01 | 296 | 0.10 |
| 62 | 14.15 | 33.96 | 1.87 | 261 | 50 | 14.41 | 33.94 | 2.35 | 25.30 | 268 | 0.16 |
| 84 | 13.24 | 34.14 | 0.90 | 230 | 75 | 13.53 | 34.02 | 1.08 | 25.55 | 245 | 0.22 |
| 136 | 12.40 | 34.38 | 0.69 | 197 | 100 | 12.98 | 34.21 | 0.79 | 25.80 | 220 | 0.28 |
| 183 | 11.84 | 34.60 | 0.44 | 170 | 150 | 12.23 | 34.53 | 0.61 | 26.20 | 183 | 0.39 |
| 233 | 11.36 | 34.56 | 0.48 | 165 | 200 | 11.67 | 34.59 | 0.45 | 26.35 | 168 | 0.48 |

123.50 CREST; September 11, 1952; 2025 GCT; 27°01'N, 115°31.5'W; sounding, 2000 fm; wind, 350°, force 6; weather, clear; sea, very rough; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.49 | 33.51 | 5.66 | 464 | 0 | 21.49 | 33.51 | 5.66 | 23.25 | 464 | 0.00 |
| 8 | 21.50 | 33.55 | 5.12 | 461 | 10 | 21.50 | 33.55 | 5.12 | 23.28 | 461 | 0.05 |
| 18 | 21.10 | 33.51 | 5.59 | 453 | 20 | 20.50 | 33.50 | 5.80 | 23.51 | 439 | 0.09 |
| 31 | 17.50 | 33.35 | 7.09 | 378 | 30 | 17.60 | 33.35 | 7.06 | 24.13 | 380 | 0.13 |
| 49 | 14.42 | 33.24 | 7.06 | 319 | 50 | 14.24 | 33.24 | 7.05 | 24.80 | 316 | 0.20 |
| 62 | 12.82 | 33.35 | 5.81 | 280 | 75 | 11.80 | 33.28 | 5.58 | 25.31 | 267 | 0.28 |
| 75 | 11.80 | 33.28 | 5.58 | 267 | 100 | 10.48 | 33.53 | 4.10 | 25.74 | 226 | 0.34 |
| 97 | 10.56 | 33.44 | 4.25 | 234 | 150 | 9.88 | 34.11 | 2.24 | 26.30 | 173 | 0.44 |
| 145 | 9.90 | 34.09 | 2.37 | 175 | 200 | 9.56 | 34.26 | 1.25 | 26.47 | 157 | 0.52 |
| 193 | 9.62 | 34.25 | 1.34 | 159 | 250 | 9.22 | 34.35 | 0.78 | 26.59 | 145 | 0.60 |
| 246 | 9.22 | 34.34 | 0.82 | 146 | 300 | 9.07 | 34.45 | 0.36 | 26.70 | 135 | 0.67 |
| 290 | 9.16 | 34.45 | 0.35 | 137 | 400 | 7.68 | 34.34 | 0.42 | 26.82 | 123 | 0.81 |
| 394 | 7.72 | 34.34 | 0.43 | 124 | 500 | 6.86 | 34.42 | 0.31 | 27.00 | 106 | 0.93 |
| 496 | 6.89 | 34.42 | 0.32 | 107 | 600 | 6.09 | 34.38 | 0.25 | 27.07 | 100 | 1.04 |
| 602 | 6.08 | 34.38 | 0.25 | 100 | | | | | | | |

127.34 CREST; September 12, 1952; 0720 GCT; 26°55.5'N, 114°06'W; sounding, 42 fm; wind, 020°, force 5; weather, clear; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.48 | 33.57 | 5.42 | 459 | 0 | 21.48 | 33.57 | 5.42 | 23.30 | 459 | 0.00 |
| 10 | 21.48 | 33.60 | 5.40 | 457 | 10 | 21.48 | 33.60 | 5.40 | 23.32 | 457 | 0.05 |
| 20 | 21.24 | 33.60 | 5.43 | 451 | 20 | 21.24 | 33.60 | 5.43 | 23.39 | 451 | 0.09 |
| 29 | 17.03 | 33.24 | 6.11 | 375 | 30 | 16.60 | 33.24 | 6.11 | 24.28 | 365 | 0.13 |
| 48 | 14.74 | 33.62 | 4.98 | 298 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| CREST; September 12, 1952; 1043 GCT; 26°43.5'N, 114°29.5'W; sounding, 1800 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 18°. | | | | | | | | | | | 127.40 |
| 0 | 22.38 | 33.53 | 5.21 | 486 | 0 | 22.38 | 33.53 | 5.21 | 23.02 | 486 | 0.00 |
| 9 | 22.38 | 33.46 | 5.21 | 491 | 10 | 22.37 | 33.46 | 5.21 | 22.97 | 490 | 0.05 |
| 19 | 21.78 | 33.51 | 5.36 | 471 | 20 | 21.65 | 33.51 | 5.35 | 23.21 | 468 | 0.10 |
| 33 | 15.89 | 33.40 | 6.38 | 338 | 30 | 17.59 | 33.43 | 6.36 | 24.19 | 374 | 0.14 |
| 52 | 12,53 | 33.39 | 5.26 | 272 | 50 | 12.76 | 33.39 | 5.35 | 25.21 | 276 | 0.20 |
| 66 | 11.70 | 33.44 | 4.41 | 253 | 75 | 10.68 | 33.48 | 4.22 | 25.67 | 233 | 0.27 |
| 80 | 10.52 | 33.49 | 4.15 | 230 | 100 | 10.19 | 33.69 | 3.48 | 25.92 | 209 | 0.32 |
| 104 | 10.17 | 33.80 | 3.23 | 201 | 150 | 9.62 | 34.13 | 2.48 | 26.36 | 168 | 0.42 |
| 154 | 9.60 | - | 2.41 | | 200 | 9.72 | 34.27 | 1.60 | 26.45 | 159 | 0.50 |
| 204 | 9.64 | 34.27 | 1.48 | 158 | 250 | 8.96 | 34.30 | 1.15 | 26.60 | 145 | 0.58 |
| 257 | 8.91 | 34.31 | 1.13 | 143 | 300 | 8.86 | 34.42 | 0.54 | 26.71 | 134 | 0.65 |
| 302 | 8.85 | 34.42 | 0.54 | 134 | 400 | 7.33 | 34.34 | 0.55 | 26.87 | 119 | 0.79 |
| 408 | 7.30 | 34.34 | 0.55 | 118 | 500 | 7.09 | 34.46 | 0.27 | 27.00 | 106 | 0.91 |
| 512 | 7.02 | 34.47 | 0.25 | 105 | 600 | 6.06 | 34.42 | 0.28 | 27.11 | 96 | 1.02 |
| 618 | 5.90 | 34.40 | 0.29 | 96 | | | | | | | |
| CREST; September 12, 1952; 1609 GCT; 26°23'N, 115°10'W; sounding, 1720 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 32°. | | | | | | | | | | | 127.50 |
| 0 | 22.70 | 33.70 | 5.25 | 482 | 0 | 22.70 | 33.70 | 5.25 | 23.06 | 482 | 0.00 |
| 8 | 22.72 | 33.70 | 5.05 | 483 | 10 | 22.73 | 33.70 | 5.07 | 23.05 | 483 | 0.05 |
| 17 | 22.74 | 33.71 | 5.18 | 482 | 20 | 22.73 | 33.71 | 5.17 | 23.06 | 482 | 0.10 |
| 29 | 22.69 | 33.71 | 5.12 | 481 | 30 | 22.65 | 33.71 | 5.13 | 23.08 | 480 | 0.14 |
| 46 | 19.46 | 33.53 | 5.70 | 411 | 50 | 18.47 | 33.52 | 5.87 | 24.04 | 388 | 0.23 |
| 59 | 17.61 | 33.51 | 5.96 | 368 | 75 | 16.21 | 33.68 | 5.51 | 24.71 | 325 | 0.32 |
| 71 | 16.70 | 33.69 | 5.67 | 335 | 100 | 13.25 | 33.63 | 4.80 | 25.30 | 268 | 0.40 |
| 90 | 14.50 | 33.62 | 5.13 | 293 | 150 | 10.61 | 33.90 | 2.85 | 26.01 | 201 | 0.51 |
| 132 | 10.96 | 33.75 | 3.36 | 218 | 200 | 9.72 | 34.19 | 1.95 | 26.39 | 165 | 0.61 |
| 173 | 10.14 | 34.11 | 2.44 | 177 | 250 | 8.85 | 34.26 | 1.41 | 26.58 | 146 | 0.69 |
| 220 | 9.38 | 34.23 | 1.64 | 157 | 300 | 8.51 | 34.31 | 0.98 | 26.68 | 137 | 0.76 |
| 258 | 8.77 | 34.27 | 1.35 | 144 | 400 | 7.49 | 34.37 | 0.37 | 26.87 | 119 | 0.90 |
| 352 | 8.14 | 34.36 | 0.46 | 128 | 500 | 6.64 | 34.39 | 0.31 | 27.01 | 106 | 1.01 |
| 450 | 6.93 | 34.38 | 0.35 | 110 | | | | | | | |
| 554 | 6.36 | 34.42 | 0.25 | 100 | | | | | | | |
| CREST; September 13, 1952; 1448 GCT; 26°29'N, 113°29'W; sounding, 41 fm; wind, 040°, force 3; weather, clear; sea, slight; wire angle, 05°. | | | | | | | | | | | 130.30 |
| 0 | 24.48 | 33.91 | 4.95 | 516 | 0 | 24.48 | 33.91 | 4.95 | 22.70 | 516 | 0.00 |
| 10 | 24.48 | 33.91 | 4.92 | 516 | 10 | 24.48 | 33.91 | 4.92 | 22.70 | 516 | 0.05 |
| 20 | 20.88 | 33.68 | 5.49 | 435 | 20 | 20.88 | 33.68 | 5.49 | 23.54 | 435 | 0.10 |
| 30 | 14.60 | 33.33 | 6.00 | 316 | 30 | 14.60 | 33.33 | 6.00 | 24.79 | 316 | 0.14 |
| 50 | 14.18 | 33.61 | 4.05 | 288 | 50 | 14.18 | 33.61 | 4.05 | 25.10 | 288 | 0.20 |
| CREST; September 13, 1952; 1206 GCT; 26°14'N, 113°45.5'W; sounding, 68 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 20°. | | | | | | | | | | | 130.35 |
| 0 | 20.86 | 33.60 | 5.40 | 441 | 0 | 20.86 | 33.60 | 5.40 | 23.49 | 441 | 0.00 |
| 9 | 20.76 | 33.60 | 5.47 | 438 | 10 | 20.74 | 33.60 | 5.47 | 23.52 | 438 | 0.04 |
| 18 | 18.12 | 33.33 | 5.91 | 393 | 20 | 17.60 | 33.33 | 5.95 | 24.11 | 381 | 0.08 |
| 28 | 16.05 | 33.33 | 6.03 | 347 | 30 | 15.58 | 33.33 | 6.04 | 24.58 | 337 | 0.12 |
| 47 | 13.98 | 33.28 | 6.06 | 308 | 50 | 13.84 | 33.27 | 6.03 | 24.90 | 306 | 0.19 |
| 70 | 13.26 | 33.24 | 5.60 | 297 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 130.40 | CREST; September 13, 1952; 0854 GCT; 26°06'N, 114°05.5'W; sounding, 950 fm; wind, 020°, force 5; weather, clear; sea, very rough; wire angle, 40°. | | | | | | | | | | |
| 0 | 21.82 | 33.51 | 5.25 | 472 | 0 | 21.82 | 33.51 | 5.25 | 23.16 | 472 | 0.00 |
| 8 | 21.84 | 33.57 | 5.19 | 468 | 10 | 21.85 | 33.57 | 5.20 | 23.20 | 469 | 0.05 |
| 23 | 20.31 | 33.51 | 5.55 | 433 | 20 | 21.79 | 33.51 | 5.29 | 23.17 | 471 | 0.09 |
| 46 | 16.88 | 33.57 | 6.05 | 348 | 30 | 17.46 | 33.52 | 5.95 | 24.29 | 364 | 0.14 |
| 68 | 15.28 | 33.46 | 5.92 | 321 | 50 | 16.25 | 33.57 | 6.04 | 24.61 | 334 | 0.21 |
| 92 | 12.86 | 33.35 | 5.62 | 281 | 75 | 14.41 | 33.41 | 5.85 | 24.89 | 307 | 0.29 |
| 134 | 10.42 | 33.60 | 3.81 | 220 | 100 | 12.12 | 33.36 | 5.49 | 25.31 | 267 | 0.36 |
| 174 | 11.72 | 34.34 | 0.95 | 187 | 150 | 11.20 | 34.13 | 1.30 | 26.08 | 194 | 0.48 |
| 247 | 9.78 | 34.33 | 1.18 | 155 | 200 | 10.97 | 34.34 | 1.08 | 26.29 | 174 | 0.57 |
| 321 | 9.56 | 34.49 | 0.33 | 140 | 250 | 9.76 | 34.33 | 1.15 | 26.49 | 155 | 0.65 |
| 400 | 8.34 | 34.49 | 0.27 | 122 | 300 | 9.65 | 34.45 | 0.56 | 26.60 | 144 | 0.73 |
| 478 | 7.59 | 34.42 | 0.23 | 116 | 400 | 8.34 | 34.49 | 0.27 | 26.84 | 122 | 0.87 |
| 651 | 5.80 | 34.38 | 0.48 | 96 | 500 | 7.32 | 34.41 | 0.24 | 26.93 | 113 | 1.00 |
| 831 | 4.86 | 34.40 | 0.35 | 84 | 600 | 6.24 | 34.39 | 0.40 | 27.06 | 101 | 1.11 |
| 1019 | 4.15 | 34.29u | 0.56 | | 700 | 5.52 | 34.38 | 0.45 | 27.14 | 93 | 1.22 |
| | | | | | 800 | 5.00 | 34.39 | 0.35 | 27.21 | 86 | 1.32 |
| | | | | | 1000 | 4.23 | (34.48) | 0.54 | (27.37) | (72) | (1.49) |
| 130.50 | CREST; September 13, 1952; 0329 GCT; 25°49'N, 114°46'W; sounding, 1850 fm; wind, 330°, force 6; weather, partly cloudy; sea, very rough; wire angle, 30°. | | | | | | | | | | |
| 0 | 22.94 | 33.60 | 5.31 | 496 | 0 | 22.94 | 33.60 | 5.31 | 22.91 | 496 | 0.00 |
| 8 | 22.95 | 33.57 | 4.88 | 498 | 10 | 22.95 | 33.57 | 4.83 | 22.89 | 498 | 0.05 |
| 18 | 22.97 | 33.60 | 4.75 | 497 | 20 | 22.95 | 33.60 | 4.78 | 22.91 | 496 | 0.10 |
| 30 | 20.05 | 33.48 | 5.27 | 429 | 30 | 20.05 | 33.48 | 5.27 | 23.61 | 429 | 0.15 |
| 47 | 17.81 | 33.39 | 5.39 | 382 | 50 | 17.39 | 33.38 | 5.60 | 24.20 | 373 | 0.23 |
| 59 | 16.32 | 33.31 | 6.22 | 354 | 75 | 15.30 | 33.28 | 6.06 | 24.60 | 335 | 0.32 |
| 71 | 15.56 | 33.28 | 6.06 | 340 | 100 | 13.77 | 33.28 | 5.98 | 24.93 | 304 | 0.40 |
| 89 | 14.58 | 33.28 | 6.06 | 320 | 150 | 10.21 | 33.43 | 4.15 | 25.71 | 229 | 0.53 |
| 128 | 11.34 | 33.28 | 4.89 | 259 | 200 | 9.87 | 34.08 | 2.15 | 26.28 | 175 | 0.63 |
| 168 | 9.84 | 33.78 | 3.53 | 197 | 250 | 9.40 | 34.20 | 1.63 | 26.45 | 159 | 0.72 |
| 212 | 9.87 | 34.13 | 1.92 | 172 | 300 | 8.82 | 34.26 | 1.23 | 26.59 | 146 | 0.80 |
| 250 | 9.40 | 34.20 | 1.63 | 159 | 400 | 8.04 | 34.36 | 0.43 | 26.79 | 127 | 0.94 |
| 341 | 8.48 | 34.31 | 0.75 | 137 | 500 | 7.00 | 34.38 | 0.30 | 26.95 | 111 | 1.07 |
| 437 | 7.74 | 34.38 | 0.36 | 121 | | | | | | | |
| 537 | 6.61 | 34.38 | 0.29 | 106 | | | | | | | |
| 130.60 | CREST; September 12, 1952; 2202 GCT; 25°29'N, 115°24'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 22°. | | | | | | | | | | |
| 0 | 23.27 | 33.64 | 5.23 | 502 | 0 | 23.27 | 33.64 | 5.23 | 22.85 | 502 | 0.00 |
| 9 | 23.27 | 33.68 | 5.21 | 499 | 10 | 23.26 | 33.68 | 5.22 | 22.88 | 499 | 0.05 |
| 23 | 22.30 | 33.82 | 5.46 | 463 | 20 | 23.15 | 33.81 | 5.40 | 23.01 | 486 | 0.10 |
| 51 | 18.22 | 33.75 | 5.60 | 365 | 30 | 21.21 | 33.81 | 5.50 | 23.55 | 435 | 0.15 |
| 74 | 16.38 | 33.60 | 6.15 | 334 | 50 | 18.40 | 33.75 | 5.59 | 24.24 | 369 | 0.23 |
| 100 | 15.42 | 33.57 | 5.62 | 316 | 75 | 16.33 | 33.60 | 6.15 | 24.62 | 333 | 0.31 |
| 149 | 11.08 | 33.60 | 4.08 | 231 | 100 | 15.42 | 33.57 | 5.62 | 24.80 | 316 | 0.40 |
| 196 | 9.98 | 34.07 | - | 178 | 150 | 11.04 | 33.60 | 4.06 | 25.70 | 230 | 0.53 |
| 289 | 8.75 | 34.23 | 1.06 | 147 | 200 | 9.90 | 34.10 | | 26.29 | 174 | 0.64 |
| 388 | 8.20 | 34.36 | 0.69 | 129 | 250 | 9.16 | 34.19 | 1.52 | 26.48 | 156 | 0.72 |
| 484 | 7.10 | 34.42 | 0.30 | 110 | 300 | 8.69 | 34.24 | 0.98 | 26.59 | 145 | 0.80 |
| 581 | 6.34 | 34.34 | 0.09 | 106 | 400 | 8.04 | 34.37 | 0.64 | 26.79 | 126 | 0.94 |
| 771 | 5.14 | 34.40 | 0.48 | 87 | 500 | 6.96 | 34.41 | 0.25 | 26.98 | 108 | 1.07 |
| 969 | 4.20 | 34.47 | 0.50 | 72 | 600 | 6.21 | 34.34 | 0.11 | 27.03 | 104 | 1.18 |
| 1165 | 3.68 | 34.49 | 0.76 | 65 | 700 | 5.55 | 34.37 | 0.32 | 27.13 | 94 | 1.29 |
| | | | | | 800 | 4.98 | 34.41 | 0.49 | 27.23 | 85 | 1.39 |
| | | | | | 1000 | 4.10 | 34.47 | 0.52 | 27.38 | 71 | 1.56 |
| 133.25 | CREST; September 13, 1952; 1856 GCT; 26°04.5'N, 112°47'W; sounding, 45 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 22.97 | 33.71 | 5.17 | 489 | 0 | 22.97 | 33.71 | 5.17 | 22.99 | 489 | 0.00 |
| 10 | 20.22 | 33.53 | 5.63 | 430 | 10 | 20.22 | 33.53 | 5.63 | 23.61 | 430 | 0.05 |
| 20 | 15.16 | 33.31 | 6.07 | 329 | 20 | 15.16 | 33.31 | 6.07 | 24.66 | 329 | 0.08 |
| 30 | 14.84 | 33.33 | 5.91 | 321 | 30 | 14.84 | 33.33 | 5.91 | 24.74 | 321 | 0.12 |
| 50 | 12.82 | 33.51 | 4.54 | 269 | 50 | 12.82 | 33.51 | 4.54 | 25.30 | 269 | 0.18 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| CREST; September 13, 1952; 2104 GCT; 25°54.5'N, 113°07.5'W; sounding, 105 fm; wind, 270°, force 3; weather, clear; sea, moderate; wire angle, 04°. | | | | | | | | | | | 133.30 |
| 0 | 23.48 | 33.89 | 4.96 | 490 | 0 | 23.48 | 33.89 | 4.96 | 22.98 | 490 | 0.00 |
| 10 | 23.20 | 33.91 | 5.01 | 481 | 10 | 23.20 | 33.91 | 5.01 | 23.07 | 481 | 0.05 |
| 25 | 21.01 | 33.86 | 5.12 | 426 | 20 | 21.90 | 33.89 | 5.11 | 23.42 | 447 | 0.09 |
| 50 | 12.69 | 33.64 | 3.56 | 257 | 30 | 19.70 | 33.82 | 5.11 | 23.96 | 396 | 0.14 |
| 74 | 11.92 | 34.04 | 2.19 | 213 | 50 | 12.69 | 33.64 | 3.56 | 25.42 | 257 | 0.20 |
| 98 | 12.80 | 34.40 | 0.96 | 203 | 75 | 11.93 | 34.10 | 2.20 | 25.92 | 209 | 0.26 |
| 122 | 12.62 | 34.49 | 0.63 | 193 | 100 | 12.78 | 34.41 | 0.89 | 26.00 | 202 | 0.31 |
| 150 | 12.46 | 34.56 | 0.50 | 185 | 150 | 12.46 | 34.56 | 0.50 | 26.18 | 185 | 0.41 |
| CREST; September 14, 1952; 0443 GCT; 25°34'N, 112°19'W; sounding, 40 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 05°. | | | | | | | | | | | 137.23 |
| 0 | 24.90 | 33.95 | 5.84 | 526 | 0 | 24.90 | 33.95 | 5.84 | 22.60 | 526 | 0.00 |
| 10 | 24.40 | 33.91 | 5.61 | 514 | 10 | 24.40 | 33.91 | 5.61 | 22.72 | 514 | 0.05 |
| 20 | 17.80 | 33.33 | 5.98 | 386 | 20 | 17.80 | 33.33 | 5.98 | 24.06 | 386 | 0.10 |
| 30 | 16.04 | 33.33 | 6.07 | 347 | 30 | 16.04 | 33.33 | 6.07 | 24.48 | 347 | 0.13 |
| 50 | 13.52 | 33.58 | 4.45 | 277 | 50 | 13.52 | 33.58 | 4.45 | 25.21 | 277 | 0.20 |
| CREST; September 14, 1952; 0124 GCT; 25°23'N, 112°47.5'W; sounding, 160 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | | 137.30 |
| 0 | 22.42 | 33.62 | 5.12 | 480 | 0 | 22.42 | 33.62 | 5.12 | 23.07 | 480 | 0.00 |
| 10 | 22.34 | 33.62 | 5.18 | 478 | 10 | 22.34 | 33.62 | 5.18 | 23.10 | 478 | 0.05 |
| 25 | 21.32 | 33.51 | 5.47 | 459 | 20 | 21.80 | 33.52 | 5.31 | 23.17 | 471 | 0.10 |
| 49 | 16.70 | 33.55 | 5.92 | 345 | 30 | 19.65 | 33.51 | 5.64 | 23.74 | 417 | 0.14 |
| 73 | 13.94 | 33.66 | 4.41 | 279 | 50 | 16.61 | 33.55 | 5.92 | 24.51 | 343 | 0.22 |
| 96 | 12.66 | 33.78 | 3.12 | 246 | 75 | 13.40 | 33.67 | 4.28 | 25.30 | 268 | 0.29 |
| 147 | 12.30 | 34.51 | 0.32 | 185 | 100 | 12.62 | 33.81 | 2.91 | 25.57 | 243 | 0.36 |
| 192 | 11.86 | 34.63 | 0.15 | 169 | 150 | 12.26 | 34.53 | 0.29 | 26.19 | 183 | 0.47 |
| | | | | | 200 | (11.80) | (34.63) | (0.14) | (26.36) | (168) | (0.56) |
| BLACK DOUGLAS; September 22, 1952; 0114 GCT; 29°22.5'N, 115°17.5'W; sounding, 34 fm; wind, 290°, force 3; weather, clear; sea, moderate; wire angle, 11°. [a] | | | | | | | | | | | 113.30 |
| 0 | 19.50 | 33.44 | 5.77 | 418 | 0 | 19.50 | 33.44 | 5.77 | 23.72 | 418 | 0.00 |
| 10 | 16.48 | 33.35 | 6.32 | 355 | 10 | 16.48 | 33.35 | 6.32 | 24.39 | 355 | 0.04 |
| 25 | 14.26 | 33.30 | 6.29 | 312 | 20 | 14.58 | 33.31 | 6.30 | 24.78 | 318 | 0.07 |
| BLACK DOUGLAS; September 22, 1952; 0524 GCT; 29°12'N, 115°39'W; sounding, 600 fm; wind, 290°, force 2; weather, clear; sea, moderate; wire angle, 05°. | | | | | | | | | | | 113.35 |
| 0 | 17.92 | 33.40 | 6.21 | 384 | 0 | 17.92 | 33.40 | 6.21 | 24.09 | 384 | 0.00 |
| 10 | 15.08 | 33.33 | 6.48 | 326 | 10 | 15.08 | 33.33 | 6.48 | 24.69 | 326 | 0.04 |
| 25 | 14.34 | 33.35 | 6.02 | 310 | 20 | 14.55 | 33.35 | 6.20 | 24.82 | 314 | 0.07 |
| 50 | 12.84 | 33.35 | 5.36 | 281 | 30 | 14.05 | 33.35 | 5.87 | 24.92 | 304 | 0.10 |
| 75 | 11.04 | 33.40 | 4.55 | 245 | 50 | 12.84 | 33.35 | 5.36 | 25.17 | 281 | 0.16 |
| 105 | 9.86 | 33.64 | 4.03 | 208 | 75 | 11.04 | 33.40 | 4.55 | 25.54 | 245 | 0.22 |
| | | | | | 100 | 10.02 | 33.60 | 4.09 | 25.88 | 213 | 0.28 |
| BLACK DOUGLAS; September 22, 1952; 1121 GCT; 29°11'N, 114°55'W; sounding, 41 fm; wind, calm; weather, clear; sea, rough; wire angle, 00°. | | | | | | | | | | | 115.27 |
| 0 | 19.57 | 33.42 | 5.88 | 421 | 0 | 19.57 | 33.42 | 5.88 | 23.69 | 421 | 0.00 |
| 10 | 15.42 | 33.24 | 6.32 | 340 | 10 | 15.42 | 33.24 | 6.32 | 24.55 | 340 | 0.04 |
| 25 | 12.51 | 33.35 | 4.88 | 275 | 20 | 13.09 | 33.30 | 5.45 | 25.08 | 289 | 0.07 |
| 50 | 11.47 | 33.49 | 3.53 | 246 | 30 | 12.24 | 33.39 | 4.50 | 25.31 | 267 | 0.10 |
| | | | | | 50 | 11.47 | 33.49 | 3.53 | 25.54 | 246 | 0.15 |

a) This is the first station to be occupied during a special current study in Sebastián Vizcaino Bay. These stations are presented separately from the other stations of CCOFI Cruise 5209 and in chronological order rather than in numerical order.

SIO

CCOFI
5209

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 115.30 | BLACK DOUGLAS; September 22, 1952; 1343 GCT; 29°05'N, 115°08'W; sounding, 51 fm; wind, 320°, force 2; weather, clear; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | 19.82 | 33.33 | 6.27 | 434 | 0 | 19.82 | 33.33 | 6.27 | 23.56 | 434 | 0.00 |
| 10 | 17.92 | 33.26 | 6.02 | 394 | 10 | 17.92 | 33.26 | 6.02 | 23.98 | 394 | 0.04 |
| 25 | 15.70 | 33.21 | 6.39 | 348 | 20 | 16.32 | 33.22 | 6.30 | 24.33 | 361 | 0.08 |
| 50 | 12.83 | 33.24 | 6.06 | 289 | 30 | 15.08 | 33.21 | 6.38 | 24.60 | 335 | 0.11 |
| 75 | 11.36 | 33.64 | 5.05 | 233 | 50 | 12.83 | 33.24 | 6.06 | 25.08 | 289 | 0.18 |
| | | | | | 75 | 11.36 | 33.64 | 5.05 | 25.67 | 233 | 0.24 |
| 115.35 | BLACK DOUGLAS; September 22, 1952; 1654 GCT; 28°55'N, 115°27.5'W; sounding, 560 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 18.07 | 33.28 | 6.37 | 396 | 0 | 18.07 | 33.28 | 6.37 | 23.96 | 396 | 0.00 |
| 10 | 17.80 | 33.28 | 6.48 | 389 | 10 | 17.80 | 33.28 | 6.48 | 24.03 | 389 | 0.04 |
| 25 | 14.83 | 33.19 | 6.08 | 331 | 20 | 15.75 | 33.21 | 6.23 | 24.45 | 349 | 0.08 |
| 50 | 13.20 | 33.39 | 5.51 | 285 | 30 | 14.48 | 33.21 | 5.96 | 24.73 | 323 | 0.11 |
| 75 | 11.50 | 33.48 | 4.26 | 247 | 50 | 13.20 | 33.39 | 5.51 | 25.13 | 285 | 0.17 |
| 105 | 10.72 | 33.77 | 2.69 | 212 | 75 | 11.50 | 33.48 | 4.26 | 25.52 | 247 | 0.24 |
| | | | | | 100 | 10.80 | 33.73 | 2.91 | 25.84 | 216 | 0.30 |
| 117.40 | BLACK DOUGLAS; September 22, 1952; 2145 GCT; 28°28'N, 115°35.5'W; sounding, 550 fm; wind, 310°, force 3; weather, partly cloudy; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | 19.85 | 33.31 | 5.99 | 436 | 0 | 19.85 | 33.31 | 5.99 | 23.53 | 436 | 0.00 |
| 10 | 18.92 | 33.31 | 5.84 | 414 | 10 | 18.92 | 33.31 | 5.84 | 23.77 | 414 | 0.04 |
| 25 | 16.32 | 33.28 | 6.34 | 356 | 20 | 17.11 | 33.29 | 6.17 | 24.20 | 373 | 0.08 |
| 50 | 14.12 | 33.19 | 6.64 | 317 | 30 | 15.74 | 33.26 | 6.45 | 24.49 | 345 | 0.12 |
| 75 | 12.98 | 33.47 | 4.95 | 275 | 50 | 14.12 | 33.19 | 6.64 | 24.79 | 317 | 0.18 |
| 105 | 12.27 | 33.93 | 2.26 | 228 | 75 | 12.98 | 33.47 | 4.95 | 25.23 | 275 | 0.26 |
| | | | | | 100 | 12.36 | 33.86 | 2.67 | 25.66 | 234 | 0.32 |
| 117.35 | BLACK DOUGLAS; September 23, 1952; 0137 GCT; 28°38'N, 115°16'W; sounding, 100 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 20.81 | 33.40 | 5.78 | 454 | 0 | 20.81 | 33.40 | 5.78 | 23.35 | 454 | 0.00 |
| 10 | 20.78 | 33.42 | 5.53 | 452 | 10 | 20.78 | 33.42 | 5.53 | 23.37 | 452 | 0.05 |
| 25 | 17.71 | 33.48 | 6.26 | 373 | 20 | 18.74 | 33.46 | 6.05 | 23.93 | 398 | 0.09 |
| 50 | 15.18 | 33.46 | 5.80 | 319 | 30 | 17.00 | 33.48 | 6.23 | 24.37 | 357 | 0.13 |
| 75 | 12.33 | 33.46 | 4.44 | 263 | 50 | 15.18 | 33.46 | 5.80 | 24.77 | 319 | 0.19 |
| 105 | 12.00 | 34.02 | 2.50 | 216 | 75 | 12.33 | 33.46 | 4.44 | 25.35 | 263 | 0.27 |
| | | | | | 100 | 12.04 | 33.90 | 2.82 | 25.75 | 226 | 0.33 |
| 117.30 | BLACK DOUGLAS; September 23, 1952; 0504 GCT; 28°48'N, 114°56.5'W; sounding, 57 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 19.53 | 33.35 | 4.91 | 426 | 0 | 19.53 | 33.35 | 4.91 | 23.65 | 426 | 0.00 |
| 10 | 19.54 | 33.35 | 4.86 | 426 | 10 | 19.54 | 33.35 | 4.86 | 23.65 | 426 | 0.04 |
| 25 | 17.93 | 33.35 | 6.16 | 387 | 20 | 18.56 | 33.35 | 5.87 | 23.89 | 402 | 0.08 |
| 50 | 15.44 | 33.28 | 6.31 | 337 | 30 | 17.34 | 33.34 | 6.22 | 24.18 | 375 | 0.12 |
| 75 | 12.12 | 33.46 | 4.54 | 259 | 50 | 15.44 | 33.28 | 6.31 | 24.57 | 337 | 0.19 |
| | | | | | 75 | 12.12 | 33.46 | 4.54 | 25.39 | 259 | 0.27 |
| 117.26 | BLACK DOUGLAS; September 23, 1952; 0814 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 180°, force 1; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 19.36 | 33.44 | 5.05 | 415 | 0 | 19.36 | 33.44 | 5.05 | 23.76 | 415 | 0.00 |
| 10 | 17.60 | 33.33 | 6.19 | 381 | 10 | 17.60 | 33.33 | 6.19 | 24.11 | 381 | 0.04 |
| 25 | 15.59 | 33.26 | 6.36 | 342 | 20 | 16.19 | 33.27 | 6.33 | 24.40 | 354 | 0.08 |
| 50 | 13.44 | 33.46 | 6.24 | 284 | 30 | 15.10 | 33.28 | 6.35 | 24.65 | 330 | 0.11 |
| | | | | | 50 | 13.44 | 33.46 | 6.24 | 25.13 | 284 | 0.17 |
| 1185.25 | BLACK DOUGLAS; September 23, 1952; 1140 GCT; 28°41'N, 114°26.5'W; sounding, 47 fm; wind, 280°, force 1; weather, clear; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 20.43 | 33.39 | 5.82 | 445 | 0 | 20.43 | 33.39 | 5.82 | 23.44 | 445 | 0.00 |
| 10 | 17.38 | 33.30 | 6.15 | 378 | 10 | 17.38 | 33.30 | 6.15 | 24.14 | 378 | 0.04 |
| 25 | 15.43 | 33.24 | 6.16 | 340 | 20 | 15.96 | 33.25 | 6.16 | 24.43 | 351 | 0.08 |
| 50 | 12.84 | 33.37 | 5.47 | 279 | 30 | 14.92 | 33.25 | 6.10 | 24.66 | 329 | 0.11 |
| | | | | | 50 | 12.84 | 33.37 | 5.47 | 25.18 | 279 | 0.17 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

BLACK DOUGLAS; September 23, 1952; 1524 GCT; 28°29'N, 114°42'W; sounding, 54 fm; wind, 280°, force 3; weather, clear; sea, rough; wire angle, 12°. 118.5.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.38 | 33.46 | 5.69 | 464 | 0 | 21.38 | 33.46 | 5.69 | 23.24 | 464 | 0.00 |
| 10 | 21.37 | 33.51 | 5.63 | 460 | 10 | 21.37 | 33.51 | 5.63 | 23.28 | 460 | 0.05 |
| 24 | 19.56 | 33.48 | 5.94 | 417 | 20 | 20.31 | 33.49 | 5.86 | 23.55 | 435 | 0.09 |
| 49 | 17.76 | 33.39 | 6.01 | 381 | 30 | 19.08 | 33.46 | 5.98 | 23.85 | 407 | 0.13 |
| 73 | 13.54 | 33.30 | 5.84 | 298 | 50 | 17.64 | 33.39 | 6.01 | 24.15 | 378 | 0.21 |
| | | | | | 75 | (13.44) | (33.29) | (5.82) | (25.00) | (296) | (0.30) |

BLACK DOUGLAS; September 23, 1952; 2031 GCT; 28°20.5'N, 115°04'W; sounding, 67 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°. 118.5.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.86 | 33.53 | 5.63 | 472 | 0 | 21.86 | 33.53 | 5.63 | 23.16 | 472 | 0.00 |
| 10 | 21.76 | 33.57 | 5.69 | 466 | 10 | 21.76 | 33.57 | 5.69 | 23.22 | 466 | 0.05 |
| 24 | 20.00 | 33.49 | 5.92 | 427 | 20 | 20.75 | 33.52 | 5.85 | 23.46 | 444 | 0.09 |
| 49 | 16.08 | 33.33 | 6.40 | 347 | 30 | 19.09 | 33.45 | 6.07 | 23.84 | 408 | 0.14 |
| 73 | 12.40 | 33.48 | 4.26 | 263 | 50 | 15.90 | 33.33 | 6.38 | 24.51 | 344 | 0.21 |
| 103 | 11.47 | 33.78 | 2.32 | 224 | 75 | 12.30 | 33.50 | 4.17 | 25.39 | 260 | 0.29 |
| | | | | | 100 | 11.51 | 33.75 | 2.48 | 25.73 | 227 | 0.35 |

BLACK DOUGLAS; September 23, 1952; 2204 GCT; 28°24.5'N, 115°08'W; sounding, 77 fm; wind, 280°, force 5; weather, partly cloudy; sea, moderate; wire angle, 18°. 118.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.22 | 33.50 | 5.77 | 457 | 0 | 21.22 | 33.50 | 5.77 | 23.32 | 457 | 0.00 |
| 10 | 21.15 | 33.51 | 5.83 | 455 | 10 | 21.15 | 33.51 | 5.83 | 23.34 | 455 | 0.05 |
| 24 | 18.41 | 33.40 | 6.11 | 395 | 20 | 19.60 | 33.43 | 6.06 | 23.69 | 421 | 0.09 |
| 48 | 14.53 | 33.39 | 5.62 | 311 | 30 | 17.00 | 33.39 | 6.05 | 24.30 | 363 | 0.13 |
| 71 | 13.02 | 33.51 | 4.27 | 272 | 50 | 14.34 | 33.39 | 5.54 | 24.89 | 307 | 0.20 |
| 100 | 11.74 | 33.70 | 2.72 | 235 | 75 | 12.86 | 33.54 | 4.07 | 25.31 | 267 | 0.27 |
| | | | | | 100 | 11.74 | 33.70 | 2.72 | 25.65 | 235 | 0.33 |

BLACK DOUGLAS; September 23, 1952; 2329 GCT; 28°27'N, 115°00.5'W; sounding, 73 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°. 118.33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.09 | 33.51 | | 453 | 0 | 21.09 | 33.51 | | 23.36 | 453 | 0.00 |
| 9 | 21.07 | 33.51 | | 453 | 10 | 21.07 | 33.51 | | 23.36 | 453 | 0.05 |
| 24 | 19.21 | 33.40 | | 414 | 20 | 20.00 | 33.44 | | 23.59 | 431 | 0.09 |
| 47 | 15.28 | 33.20 | | 340 | 30 | 18.00 | 33.32 | | 24.01 | 391 | 0.13 |
| 70 | 12.54 | 33.37 | | 274 | 50 | 14.84 | 33.21 | | 24.65 | 330 | 0.20 |

BLACK DOUGLAS; September 24, 1952; 0149 GCT; 28°17'N, 114°54'W; sounding, 59 fm; wind, 310°, force 5; weather, clear; sea, rough; wire angle, 17°. 119.33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.06 | 33.53 | 5.69 | 451 | 0 | 21.06 | 33.53 | 5.69 | 23.38 | 451 | 0.00 |
| 10 | 21.07 | 33.53 | 5.69 | 451 | 10 | 21.07 | 33.53 | 5.69 | 23.38 | 451 | 0.05 |
| 24 | 20.78 | 33.53 | 5.74 | 444 | 20 | 20.88 | 33.53 | 5.73 | 23.43 | 446 | 0.09 |
| 48 | 19.40 | 33.48 | 5.82 | 413 | 30 | 20.00 | 33.52 | 5.77 | 23.66 | 425 | 0.13 |
| 72 | 16.04 | 33.29 | 6.02 | 350 | 50 | 19.18 | 33.47 | 5.84 | 23.83 | 408 | 0.22 |
| | | | | | 75 | (15.50) | (33.26) | (6.02) | (24.54) | (340) | (0.31) |

BLACK DOUGLAS; September 24, 1952; 0423 GCT; 28°03'N, 114°54'W; sounding, 45 fm; wind, 310°, force 3; weather, clear; sea, rough; wire angle, 05°. 120.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.18 | 33.49 | 5.72 | 457 | 0 | 21.18 | 33.49 | 5.72 | 23.32 | 457 | 0.00 |
| 10 | 21.13 | 33.48 | 5.62 | 456 | 10 | 21.13 | 33.48 | 5.62 | 23.32 | 456 | 0.05 |
| 25 | 19.43 | 33.42 | 5.89 | 418 | 20 | 19.95 | 33.44 | 5.78 | 23.61 | 429 | 0.09 |
| 50 | 16.39 | 33.28 | 6.36 | 358 | 30 | 18.93 | 33.39 | 6.05 | 23.83 | 408 | 0.13 |
| 75 | 12.48 | 33.40 | 3.38 | 270 | 50 | 16.39 | 33.28 | 6.36 | 24.36 | 358 | 0.21 |
| | | | | | 75 | 12.48 | 33.40 | 3.38 | 25.28 | 270 | 0.29 |

BLACK DOUGLAS; September 24, 1952; 0842 GCT; 28°13'N, 114°34'W; sounding, 48 fm; wind, 310°, force 4; weather, clear; sea, moderate; wire angle, 18°. 120.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.99 | 33.51 | 5.63 | 451 | 0 | 20.99 | 33.51 | 5.63 | 23.39 | 451 | 0.00 |
| 10 | 20.98 | 33.44 | 5.57 | 455 | 10 | 20.98 | 33.44 | 5.57 | 23.33 | 455 | 0.05 |
| 24 | 19.76 | 33.44 | 5.89 | 425 | 20 | 19.85 | 33.44 | 5.82 | 23.63 | 427 | 0.09 |
| 48 | 17.87 | 33.35 | 5.89 | 386 | 30 | 19.60 | 33.42 | 5.89 | 23.68 | 422 | 0.13 |
| 71 | 12.88 | 33.20 | 5.85 | 292 | 50 | 17.45 | 33.34 | 5.89 | 24.16 | 377 | 0.21 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 120.25 | BLACK DOUGLAS; September 24, 1952; 1245 GCT; 28°23'N, 114°14.5'W; sounding, 28 fm; wind, 290°, force 1; weather, clear; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 21.02 | 33.37 | | 462 | 0 | 21.02 | 33.37 | | 23.27 | 462 | 0.00 |
| 10 | 19.88 | 33.33 | | 436 | 10 | 19.88 | 33.33 | | 23.54 | 436 | 0.04 |
| 25 | 14.95 | 33.28 | | 327 | 20 | 16.43 | 33.30 | | 24.36 | 357 | 0.08 |
| 121.26 | BLACK DOUGLAS; September 24, 1952; 1500 GCT; 28°09.5'N, 114°11.5'W; sounding, 10 fm; wind, 290°, force 2; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 23.37 | 34.42 | 5.29 | 448 | 0 | 23.37 | 34.42 | 5.29 | 23.41 | 448 | 0.00 |
| 10 | 23.32 | - | 5.31 | | 10 | 23.32 | | 5.31 | | | |
| 121.28 | BLACK DOUGLAS; September 24, 1952; 1615 GCT; 28°02.5'N, 114°16'W; sounding, 7 fm; wind, 290°, force 2; weather, clear; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 24.07 | 34.42 | 5.11 | 468 | 0 | 24.07 | 34.42 | 5.11 | 23.20 | 468 | 0.00 |
| 10 | 24.00 | 34.34 | 5.16 | 472 | 10 | 24.00 | 34.34 | 5.16 | 23.16 | 472 | 0.05 |
| 121.30 | BLACK DOUGLAS; September 24, 1952; 1955 GCT; 28°01'N, 114°27'W; sounding, 24 fm; wind, 310°, force 4; weather, cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 20.20 | 33.39 | 5.87 | 439 | 0 | 20.20 | 33.39 | 5.87 | 23.50 | 439 | 0.00 |
| 10 | 20.12 | 33.39 | 5.90 | 437 | 10 | 20.12 | 33.39 | 5.90 | 23.53 | 437 | 0.04 |
| 25 | 16.08 | 33.31 | 6.37 | 349 | 20 | 17.75 | 33.34 | 6.18 | 24.08 | 384 | 0.08 |
| 121.34 | BLACK DOUGLAS; September 24, 1952; 2241 GCT; 27°54.5'N, 114°44.5'W; sounding, 32 fm; wind, 330°, force 2; weather, partly cloudy; sea, rough; wire angle, 02°. | | | | | | | | | | |
| 0 | 20.74 | 33.42 | 5.80 | 451 | 0 | 20.74 | 33.42 | 5.80 | 23.38 | 451 | 0.00 |
| 10 | 20.54 | 33.37 | 5.87 | 449 | 10 | 20.54 | 33.37 | 5.87 | 23.40 | 449 | 0.05 |
| 25 | 16.99 | 33.40 | 6.53 | 362 | 20 | 18.70 | 33.39 | 6.40 | 23.89 | 403 | 0.09 |
| 50 | 12.62 | 33.28 | 5.79 | 282 | 30 | 15.92 | 33.39 | 6.47 | 24.55 | 340 | 0.12 |
| | | | | | 50 | 12.62 | 33.28 | 5.79 | 25.16 | 282 | 0.19 |
| 119.42 | BLACK DOUGLAS; September 26, 1952; 1005 GCT; 28°00'N, 115°29'W; sounding, 72 fm; wind, 310°, force 3; weather, overcast; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 0 | 18.86 | 33.47 | 5.97 | 401 | 0 | 18.86 | 33.47 | 5.97 | 23.91 | 401 | 0.00 |
| 10 | 18.83 | 33.49 | 6.03 | 398 | 10 | 18.83 | 33.49 | 6.03 | 23.93 | 398 | 0.04 |
| 25 | 17.89 | 33.37 | 6.09 | 385 | 20 | 18.76 | 33.42 | 6.07 | 23.90 | 402 | 0.08 |
| 50 | 14.19 | 33.24 | 6.37 | 315 | 30 | 16.80 | 33.33 | 6.15 | 24.30 | 363 | 0.12 |
| 75 | 11.75 | 33.39 | 4.31 | 258 | 50 | 14.19 | 33.24 | 6.37 | 24.81 | 315 | 0.19 |
| | | | | | 75 | 11.75 | 33.39 | 4.31 | 25.41 | 258 | 0.26 |
| 120.43 | BLACK DOUGLAS; September 26, 1952; 1107 GCT; 27°49.5'N, 115°27'W; sounding, 140 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 19.22 | 33.30 | 5.87 | 422 | 0 | 19.22 | 33.30 | 5.87 | 23.69 | 422 | 0.00 |
| 10 | 19.21 | 33.37 | 5.89 | 416 | 10 | 19.21 | 33.37 | 5.89 | 23.74 | 416 | 0.04 |
| 25 | 16.84 | 33.35 | 6.43 | 363 | 20 | 17.90 | 33.36 | 6.33 | 24.06 | 386 | 0.08 |
| 49 | 13.37 | 33.28 | 6.14 | 296 | 30 | 15.80 | 33.33 | 6.39 | 24.53 | 341 | 0.12 |
| 74 | 11.90 | 33.28 | 4.78 | 269 | 50 | 13.30 | 33.28 | 6.11 | 25.02 | 295 | 0.18 |
| 103 | 10.44 | 33.62 | 3.93 | 219 | 75 | 11.84 | 33.28 | 4.74 | 25.30 | 268 | 0.25 |
| | | | | | 100 | 10.59 | 33.57 | 4.01 | 25.76 | 225 | 0.32 |
| 121.41 | BLACK DOUGLAS; September 26, 1952; 1344 GCT; 27°40.5'N, 115°10.5'W; sounding, 150 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 18.3 | - | | | 0 | 18.3 | | | | | |
| 10 | 18.40 | 33.39 | | 395 | 10 | 18.40 | 33.39 | | 23.96 | 395 | |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 123.37-B | IX-26 | 2239 | 27°24.0' | 114°39.5' | 39 | 290° | 5 | clear | rough | 19.40 | 33.46 |
| 127.34-B | 27 | 0346 | 26°55.5' | 114°06.0' | 47 | 290° | 3 | clear | rough | 20.28 | 33.57 |
| 130.26-B | 27 | 1103 | 26°37.0' | 113°13.5' | 24 | 020° | 5 | clear | moderate | 22.88 | 33.71 |
| 133.21-B | 27 | 1712 | 26°13.0' | 112°32.5' | 26 | 120° | 2 | clear | moderate | 23.08 | 33.93 |
| 137.23-B | 28 | 0235 | 25°34.0' | 112°18.5' | 38 | 290° | 1 | partly cloudy | slight | 25.18 | 33.40 |
| 140.30-B | 28 | 0923 | 24°45.5' | 112°24.0' | 60 | 310° | 2 | clear | slight | 23.72 | 33.53 |
| 143.26-B | 29 | 0950 | 24°19.0' | 111°48.0' | 40 | 320° | 1 | partly cloudy | slight | 25.98 | 34.25 |
| 147.20-B | 29 | 1741 | 23°56.0' | 111°03.5' | 75 | calm | | partly cloudy | moderate | 27.82 | 34.38 |
| 150.19-B | 29 | 2326 | 23°23.5' | 110°39.0' | 78 | 160° | 1 | partly cloudy | moderate | 26.96 | 34.09 |
| 153.16-B | 30 | 0601 | 22°55.0' | 110°07.0' | 520 | 090° | 1 | partly cloudy | moderate | 29.33 | 34.70 |
| Magdalena Bay No. 1 $141^5$.27-B | 28 | 2017 | 24°34.5' | 112°00.5' | 15 | 200° | 1 | cloudy | slight | 25.57 | 34.05 |
| Magdalena Bay No. 2 $141^5$.25-B | 28 | 2126 | 24°32.5' | 111°52.5' | 13 | 300° | 2 | partly cloudy | slight | 26.99 | 34.56 |
| Magdalena Bay No. 3 $141^5$.26-B | 29 | 0451 | 24°38.5' | 111°59.0' | 12 | 320° | 1 | partly cloudy | very rough | 25.61 | 34.14 |
| 154.14-B | 30 | 0926 | 22°49.5' | 109°55.0' | 680 | 090° | 1 | cloudy | moderate | 29.40 | 34.63 |
| 154.12-B | 30 | 1123 | 22°53.0' | 109°45.0' | 540 | 330° | 1 | cloudy | moderate | 29.60 | 34.76 |
| 154G.15-B | 30 | 1322 | 23°00.0' | 109°35.0' | 390 | 330° | 2 | cloudy | moderate | 29.66 | 34.70 |
| 154G.25-B | 30 | 1528 | 23°06.0' | 109°24.5' | 55 | 070° | 2 | cloudy | moderate | 29.62 | 34.54 |

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## TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 153G.32-B | IX-30 | 1751 | 23°19.5' | 109°22.0' | 400 | 060° | 1 | cloudy | moderate | 29.71 | 34.58 |
| $151^{5}$G.39-B | 30 | 2018 | 23°35.5' | 109°26.0' | 210 | 020° | 1 | partly cloudy | slight | 29.70 | 34.49 |
| 150G.39-B | 30 | 2222 | 23°48.0' | 109°34.5' | 190 | 110° | 1 | cloudy | slight | 29.63 | 34.52 |
| $148^{5}$G.37-B | X-1 | 0025 | 23°57.0' | 109°42.0' | 400 | calm | | cloudy | slight | 29.34 | 34.65 |
| 147G.31-B | 1 | 0220 | 24°11.0' | 109°56.0' | 160 | calm | | partly cloudy | slight | 28.06 | 34.67 |
| $145^{5}$G.27-B | 1 | 0418 | 24°21.0' | 110°07.0' | 350 | 270° | 1 | partly cloudy | slight | 28.70 | 34.88 |
| $144^{5}$G.26-B | 1 | 0621 | 24°30.5' | 110°15.5' | 300 | 270° | 1 | partly cloudy | slight | 28.74 | 35.01 |
| $143^{5}$G.21-B | 1 | 0828 | 24°36.0' | 110°26.0' | 140 | 180° | 2 | clear | slight | 29.90 | 35.16 |
| $144^{5}$G.10-B | 3 | 0457 | 24°21.0' | 110°29.5' | 76 | calm | | clear | slight | 29.76 | 35.16 |
| 143G.11-B | 3 | 0755 | 24°38.0' | 110°38.0' | 240 | 220° | 2 | clear | slight | 29.42 | 35.16 |
| 142G.16-B | 3 | 0931 | 24°47.0' | 110°38.0' | 73 | 160° | 1 | partly cloudy | slight | 29.75 | 35.15 |
| 140G.17-B | 3 | 1215 | 25°04.0' | 110°46.5' | 75 | calm | | partly cloudy | slight | 29.78 | 35.12 |
| $138^{5}$G.18-B | 3 | 1501 | 25°17.0' | 110°55.0' | 120 | 300° | 1 | partly cloudy | slight | 30.01 | 35.07 |
| 137G.23-B | 3 | 1648 | 25°30.5' | 110°59.0' | 67 | 300° | 1 | partly cloudy | missing | 29.58 | 35.10 |
| $135^{5}$G.19-B | 3 | 1901 | 25°43.0' | 111°10.0' | 110 | calm | | partly cloudy | missing | 29.90 | 35.05 |
| $134^{5}$G.26-B | 3 | 2053 | 25°55.5' | 111°08.0' | 180 | 090° | 1 | partly cloudy | slight | 30.00 | 35.05 |
| $134^{5}$G.29-B | 4 | 0343 | 25°58.0' | 111°07.0' | 30 | 100° | 1 | partly cloudy | slight | 29.40 | 34.99 |
| 133G.35-B | 4 | 0715 | 26°13.0' | 111°08.0' | 300 | 250° | 1 | partly cloudy | slight | 30.20 | 35.16 |
| $131^{5}$G.33-B | 4 | 1018 | 26°25.0' | 111°19.0' | 200 | calm | | partly cloudy | calm | 30.16 | 35.34 |

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 130G.31-B | X-4 | 1313 | 26°38.5' | 111°30.0' | 120 | 250° | 1 | partly cloudy | slight | 29.96 | 35.34 |
| $128^{5}$G.27-B | 4 | 1543 | 26°51.0' | 111°42.0' | 300 | 260° | 1 | partly cloudy | slight | 30.22 | 35.25 |
| 128G.19-B | 5 | 0135 | 26°51.0' | 111°53.0' | 12 | 270° | 1 | partly cloudy | slight | 29.98 | 35.46 |
| $128^{5}$G.36-B | 5 | 0622 | 26°54.5' | 111°33.5' | 600 | calm | | partly cloudy | slight | 30.16 | 35.52 |
| $130^{5}$G.43-B | 5 | 1019 | 26°39.0' | 111°15.0' | 540 | calm | | clear | calm | 30.38 | 35.21 |
| 133G.46-B | 5 | 1422 | 26°21.0' | 110°59.0' | 400 | calm | | clear | calm | 30.04 | 35.17 |
| 135G.50-B | 5 | 1820 | 26°03.0' | 110°42.5' | 700 | calm | | clear | calm | 30.42 | 35.05 |
| $137^{5}$G.46-B | 5 | 2220 | 25°39.0' | 110°32.5' | 760 | calm | | partly cloudy | slight | 30.44 | 34.99 |
| 140G.43-B | 6 | 0220 | 25°17.0' | 110°24.0' | 800 | 210° | 1 | partly cloudy | slight | 30.54 | 35.16 |
| $142^{5}$G.42-B | 6 | 0621 | 24°55.0' | 110°10.5' | 640 | 200° | 1 | partly cloudy | slight | 30.42 | 35.10 |
| 145G.46-B | 6 | 1020 | 24°35.5' | 109°55.0' | 500 | 190° | 2 | clear | slight | 30.08 | 35.20 |
| $147^{5}$G.49-B | 6 | 1420 | 24°15.5' | 109°37.5' | 400 | 190° | 1 | partly cloudy | slight | 30.18 | 34.67 |
| 150G.48-B | 6 | 1819 | 23°53.0' | 109°26.0' | 1020 | calm | | partly cloudy | slight | 30.00 | 34.56 |
| $152^{5}$G.41-B | 6 | 2225 | 23°27.0' | 109°19.5' | 560 | 140° | 1 | partly cloudy | slight | 30.40 | 34.79 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| **60.55** | CREST; October 19, 1952; 2003 GCT; 37°47.5'N, 123°16'W; sounding, 85 fm; wind, 320°, force 3; weather, fog; sea, slight; wire angle, 08°. | | | | | | | | | | |
| 0 | 12.95 | 33.06 | 6.31 | 304 | 0 | 12.95 | 33.06 | 6.31 | 24.92 | 304 | 0.00 |
| 10 | 11.66 | 33.10 | 6.10 | 278 | 10 | 11.66 | 33.10 | 6.10 | 25.20 | 278 | 0.03 |
| 20 | 10.77 | 33.17 | 5.56 | 257 | 20 | 10.77 | 33.17 | 5.56 | 25.41 | 257 | 0.06 |
| 30 | 10.72 | 33.34 | 4.93 | 244 | 30 | 10.72 | 33.34 | 4.93 | 25.55 | 244 | 0.08 |
| 50 | 9.89 | 33.53 | 3.85 | 216 | 50 | 9.89 | 33.53 | 3.85 | 25.84 | 216 | 0.13 |
| 74 | 9.34 | 33.73 | 2.97 | 193 | 75 | 9.33 | 33.74 | 2.90 | 26.10 | 192 | 0.18 |
| 100 | 9.26 | 33.84 | 2.10 | 184 | 100 | 9.26 | 33.84 | 2.10 | 26.19 | 184 | 0.23 |
| 123 | 9.07 | 33.91 | 2.05 | 175 | | | | | | | |
| **60.60** | CREST; October 19, 1952; 1649 GCT; 37°38'N, 123°38'W; sounding, 1650 fm; wind, 020°, force 2; weather, fog; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 14.31 | 33.19 | 6.13 | 321 | 0 | 14.31 | 33.19 | 6.13 | 24.75 | 321 | 0.00 |
| 10 | 14.00 | 33.22 | 6.20 | 313 | 10 | 14.00 | 33.22 | 6.20 | 24.83 | 313 | 0.03 |
| 25 | 12.36 | 33.21 | 6.07 | 282 | 20 | 13.25 | 33.21 | 6.15 | 24.98 | 299 | 0.06 |
| 50 | 10.64 | 33.43 | 4.50 | 236 | 30 | 11.95 | 33.23 | 5.97 | 25.25 | 273 | 0.09 |
| 74 | 9.48 | 33.60 | 3.59 | 205 | 50 | 10.64 | 33.43 | 4.50 | 25.64 | 236 | 0.14 |
| 98 | 8.77 | 33.77 | 3.06 | 181 | 75 | 9.43 | 33.61 | 3.55 | 25.98 | 203 | 0.20 |
| 152 | 8.26 | 33.95 | 2.45 | 161 | 100 | 8.73 | 33.79 | 3.02 | 26.23 | 179 | 0.25 |
| 199 | 7.78 | 34.04 | 2.29 | 147 | 150 | 8.28 | 33.94 | 2.47 | 26.42 | 162 | 0.33 |
| 247 | 7.31 | 34.05 | 2.15 | 140 | 200 | 7.77 | 34.04 | 2.28 | 26.58 | 147 | 0.41 |
| 295 | 6.90 | 34.09 | 1.86 | 132 | 250 | 7.28 | 34.05 | 2.14 | 26.65 | 140 | 0.48 |
| 394 | 6.67 | 34.23 | 0.96 | 118 | 300 | 6.88 | 34.10 | 1.82 | 26.75 | 131 | 0.55 |
| 487 | 5.80 | 34.24 | 0.73 | 107 | 400 | 6.62 | 34.23 | 0.91 | 26.89 | 118 | 0.68 |
| 586 | 5.19 | 34.31 | 0.46 | 95 | 500 | 5.71 | 34.25 | 0.70 | 27.02 | 105 | 0.80 |
| 779 | 4.20 | 34.42 | 0.34 | 76 | 600 | 5.12 | 34.32 | 0.41 | 27.14 | 93 | 0.91 |
| 971 | 3.76 | 34.43 | 0.40 | 71 | 700 | 4.56 | 34.38 | 0.36 | 27.26 | 82 | 1.00 |
| | | | | | 800 | 4.12 | 34.42 | 0.34 | 27.33 | 75 | 1.09 |
| | | | | | 1000 | (3.71) | (34.43) | (0.41) | (27.38) | (70) | (1.25) |
| **60.70** | CREST; October 19, 1952; 1105 GCT; 37°19.5'N, 124°23'W; sounding, 2000 fm; wind, 090°, force 2; weather, fog; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | 15.93 | 32.98 | 5.33 | 370 | 0 | 15.93 | 32.98 | 5.33 | 24.23 | 370 | 0.00 |
| 10 | 14.05 | 33.14 | 5.60 | 319 | 10 | 14.05 | 33.14 | 5.60 | 24.76 | 319 | 0.03 |
| 21 | 13.47 | 33.13 | 6.20 | 309 | 20 | 13.60 | 33.13 | 6.20 | 24.85 | 311 | 0.07 |
| 35 | 11.69 | 33.12 | 5.70 | 277 | 30 | 12.12 | 33.12 | 5.92 | 25.13 | 284 | 0.10 |
| 51 | 10.86 | 33.23 | 5.35 | 254 | 50 | 10.93 | 33.23 | 5.37 | 25.43 | 256 | 0.15 |
| 64 | 10.00 | 33.28 | 3.40 | 237 | 75 | 9.00 | 33.32 | 3.70 | 25.82 | 218 | 0.21 |
| 81 | 8.72 | 33.35 | 3.72 | 212 | 100 | 8.68 | 33.61 | 2.87 | 26.10 | 192 | 0.26 |
| 99 | 8.68 | 33.57 | 2.86 | 195 | 150 | 8.34 | 33.94 | 2.42 | 26.41 | 162 | 0.35 |
| 122 | 8.62 | 33.78 | 3.45 | 178 | 200 | 8.23 | 34.08 | 2.21 | 26.54 | 150 | 0.43 |
| 150 | 8.34 | 33.94 | 2.42 | 162 | 250 | 7.52 | 34.08 | 1.61 | 26.64 | 141 | 0.51 |
| 196 | 8.27 | 34.07 | 2.26 | 152 | 300 | 6.92 | 34.09 | 1.29 | 26.73 | 132 | 0.58 |
| 243 | 7.62 | 34.08 | 1.68 | 142 | 400 | 6.25 | 34.15 | 0.80 | 26.87 | 119 | 0.71 |
| 289 | 7.00 | 34.09 | 1.37 | 133 | 500 | 5.60 | 34.19 | 0.61 | 26.98 | 108 | 0.83 |
| 387 | 6.35 | 34.15 | 0.82 | 120 | 600 | (5.16) | (34.30) | | (27.12) | (95) | (0.93) |
| 483 | 5.69 | 34.18 | 0.64 | 110 | | | | | | | |
| 586 | 5.22 | 34.29 | 0.45 | 96 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; October 19, 1952; 0527 GCT; 37°04.5'N, 125°07'W; sounding, 2000 fm; wind, 160°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 60.80 |
| 0 | 16.89 | 33.04 | 5.62 | 386 | 0 | 16.89 | 33.04 | 5.62 | 24.06 | 386 | 0.00 |
| 10 | 16.56 | 33.04 | 5.65 | 379 | 10 | 16.56 | 33.04 | 5.65 | 24.13 | 379 | 0.04 |
| 25 | 15.60 | 33.06 | 5.89 | 357 | 20 | 16.05 | 33.05 | 5.86 | 24.26 | 367 | 0.08 |
| 50 | 10.46 | 33.07 | 5.47 | 260 | 30 | 15.00 | 33.06 | 5.87 | 24.50 | 344 | 0.11 |
| 73 | 9.01 | 33.22 | 4.76 | 226 | 50 | 10.46 | 33.07 | 5.47 | 25.39 | 260 | 0.17 |
| 97 | 8.60 | 33.44 | 4.09 | 203 | 75 | 9.00 | 33.24 | 4.70 | 25.76 | 224 | 0.23 |
| 149 | 7.88 | 33.87 | 3.08 | 161 | 100 | 8.54 | 33.46 | 3.99 | 26.01 | 201 | 0.29 |
| 196 | 7.53 | 33.98 | 2.65 | 148 | 150 | 7.86 | 33.87 | 3.06 | 26.43 | 161 | 0.38 |
| 243 | 6.96 | 34.04 | 1.91 | 136 | 200 | 7.48 | 33.99 | 2.59 | 26.58 | 147 | 0.46 |
| 290 | 6.60 | 34.11 | 1.39 | 126 | 250 | 6.90 | 34.05 | 1.81 | 26.71 | 135 | 0.53 |
| 388 | 5.88 | 34.14 | 0.91 | 115 | 300 | 6.52 | 34.12 | 1.31 | 26.81 | 124 | 0.59 |
| 485 | 5.24 | 34.22 | 0.57 | 102 | 400 | 5.78 | 34.15 | 0.87 | 26.93 | 113 | 0.72 |
| 584 | 4.90 | 34.32 | 0.38 | 91 | 500 | 5.19 | 34.23 | 0.52 | 27.06 | 101 | 0.83 |
| 776 | 4.28 | 34.41 | 0.34 | 77 | 600 | 4.86 | 34.33 | 0.38 | 27.18 | 89 | 0.93 |
| 968 | 3.69 | 34.29u | 0.51 | | 700 | 4.50 | 34.39 | 0.35 | 27.27 | 81 | 1.02 |
| 1163 | 3.27 | 34.52 | 0.81 | 59 | 800 | 4.18 | 34.42 | 0.36 | 27.33 | 76 | 1.11 |
| | | | | | 1000 | 3.60 | 34.48 | 0.55 | 27.44 | 65 | 1.27 |
| CREST; October 19, 1952; 0052 GCT; 36°46'N, 125°46'W; sounding, 2000 fm; wind, 200°, force 3; weather, partly cloudy; sea, slight; wire angle, 06°. | | | | | | | | | | | 60.90 |
| 0 | 17.19 | 33.06 | 5.62 | 392 | 0 | 17.19 | 33.06 | 5.62 | 24.00 | 392 | 0.00 |
| 10 | 16.78 | 33.06 | 5.74 | 382 | 10 | 16.78 | 33.06 | 5.74 | 24.10 | 382 | 0.04 |
| 20 | 16.67 | 33.06 | 5.60 | 380 | 20 | 16.67 | 33.06 | 5.60 | 24.12 | 380 | 0.08 |
| 35 | 14.47 | 33.01 | 6.02 | 337 | 30 | 16.58 | 33.05 | 5.90 | 24.14 | 379 | 0.11 |
| 50 | 10.70 | 33.08 | 5.62 | 263 | 50 | 10.70 | 33.08 | 5.62 | 25.36 | 263 | 0.18 |
| 65 | 9.25 | 33.24 | 4.98 | 228 | 75 | 8.86 | 33.42 | 4.40 | 25.93 | 209 | 0.24 |
| 79 | 8.73 | 33.49 | 4.19 | 202 | 100 | 8.32 | 33.66 | 3.71 | 26.20 | 183 | 0.29 |
| 98 | 8.38 | 33.65 | 3.74 | 185 | 150 | 7.53 | 33.91 | 2.95 | 26.51 | 153 | 0.37 |
| 122 | 7.91 | 33.76 | 3.23 | 170 | 200 | 7.29 | 34.05 | 2.23 | 26.65 | 140 | 0.45 |
| 150 | 7.53 | 33.91 | 2.95 | 153 | 250 | 6.67 | 34.04 | 2.03 | 26.73 | 132 | 0.52 |
| 197 | 7.32 | 34.05 | 2.27 | 140 | 300 | 6.08 | 34.06 | 1.76 | 26.82 | 124 | 0.58 |
| 243 | 6.77 | 34.04 | 2.07 | 134 | | | | | | | |
| 288 | 6.16 | 34.05 | 1.83 | 125 | | | | | | | |
| 389 | 5.56 | 34.16 | 0.94 | 110 | | | | | | | |
| CREST; October 18, 1952; 1939 GCT; 36°27'N, 126°30'W; sounding, 2000 fm; wind, 190°, force 3; weather, partly cloudy; sea, slight; wire angle, 08°. | | | | | | | | | | | 60.100 |
| 0 | 17.27 | 32.83 | 5.31 | 410 | 0 | 17.27 | 32.83 | 5.31 | 23.81 | 410 | 0.00 |
| 10 | 17.17 | 32.84 | 5.42 | 407 | 10 | 17.17 | 32.84 | 5.42 | 23.84 | 407 | 0.04 |
| 25 | 16.29 | 32.90 | 5.71 | 383 | 20 | 16.87 | 32.88 | 5.60 | 23.94 | 398 | 0.08 |
| 50 | 13.81 | 32.81 | 6.13 | 339 | 30 | 16.20 | 32.90 | 5.82 | 24.11 | 381 | 0.12 |
| 74 | 10.44 | 32.83 | 5.83 | 277 | 50 | 13.81 | 32.81 | 6.13 | 24.56 | 339 | 0.19 |
| 98 | 9.14 | 32.95 | 5.59 | 248 | 75 | 10.35 | 32.84 | 5.81 | 25.23 | 275 | 0.27 |
| 151 | 8.16 | 33.56 | 4.30 | 188 | 100 | 9.12 | 32.97 | 5.55 | 25.53 | 246 | 0.34 |
| 198 | 7.59 | 33.87 | 3.88 | 157 | 150 | 8.18 | 33.55 | 4.31 | 26.13 | 189 | 0.44 |
| 245 | 7.08 | 33.97 | 3.20 | 143 | 200 | 7.57 | 33.88 | 3.85 | 26.48 | 156 | 0.53 |
| 290 | 6.58 | 34.00 | 2.53 | 134 | 250 | 7.02 | 33.98 | 3.11 | 26.63 | 141 | 0.61 |
| 386 | 5.80 | 34.09 | 1.27 | 118 | 300 | 6.50 | 34.01 | 2.39 | 26.73 | 132 | 0.68 |
| 475 | 5.14 | 34.14 | 0.96 | 107 | 400 | 5.69 | 34.10 | 1.20 | 26.90 | 116 | 0.81 |
| 568 | 4.79 | 34.27 | 0.47 | 93 | 500 | 5.05 | 34.17 | 0.83 | 27.03 | 103 | 0.92 |
| 750 | 4.20 | 34.38 | 0.81 | 79 | 600 | 4.68 | 34.30 | 0.53 | 27.18 | 90 | 1.03 |
| 941 | 3.74 | 34.48 | 0.75 | 67 | 700 | 4.34 | 34.35 | 0.73 | 27.26 | 82 | 1.12 |
| 1140 | 3.30 | - | - | | 800 | 4.08 | 34.40 | 0.79 | 27.32 | 76 | 1.20 |
| | | | | | 1000 | 3.62 | (34.49) | | (27.44) | (65) | (1.36) |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

60.110 CREST; October 18, 1952; 1539 GCT; 36°12'N, 127°07'W; sounding, 2000 fm; wind, 200°, force 3; weather, partly cloudy; sea, slight; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.49 | 32.92 | 5.69 | 409 | 0 | 17.49 | 32.92 | 5.69 | 23.83 | 409 | 0.00 |
| 10 | 17.51 | 32.97 | 5.42 | 405 | 10 | 17.51 | 32.97 | 5.42 | 23.86 | 405 | 0.04 |
| 20 | 17.34 | 32.97 | 6.08 | 402 | 20 | 17.34 | 32.97 | 6.08 | 23.90 | 402 | 0.08 |
| 35 | 17.31 | 32.97 | 5.41 | 401 | 30 | 17.32 | 32.97 | 5.50 | 23.90 | 401 | 0.12 |
| 50 | 13.22 | 32.86 | 6.47 | 324 | 50 | 13.22 | 32.86 | 6.47 | 24.71 | 324 | 0.19 |
| 64 | 11.76 | 32.94 | 6.88 | 291 | 75 | 10.80 | 32.91 | 6.20 | 25.21 | 277 | 0.27 |
| 78 | 10.55 | 32.90 | 5.96 | 274 | 100 | 9.34 | 33.07 | 5.01 | 25.58 | 242 | 0.33 |
| 98 | 9.42 | 33.04 | 5.03 | 245 | 150 | 8.62 | 33.52 | 3.90 | 26.04 | 198 | 0.45 |
| 121 | 8.90 | 33.26 | 4.96 | 221 | 200 | 8.09 | 33.89 | 3.29 | 26.41 | 163 | 0.54 |
| 149 | 8.62 | 33.51 | 3.91 | 198 | 250 | 7.47 | 33.99 | 2.88 | 26.58 | 147 | 0.62 |
| 193 | 8.14 | 33.87 | 3.37 | 165 | 300 | 6.81 | 34.01 | 2.54 | 26.69 | 136 | 0.69 |
| 239 | 7.62 | 33.98 | 2.95 | 149 | 400 | 5.97 | 34.11 | 1.15 | 26.88 | 119 | 0.82 |
| 284 | 6.96 | 34.00 | 2.64 | 139 | 500 | 5.36 | 34.20 | 0.71 | 27.02 | 105 | 0.94 |
| 382 | 6.08 | 34.09 | 1.32 | 121 | | | | | | | |
| 476 | 5.50 | 34.18 | 0.80 | 108 | | | | | | | |
| 579 | 4.92 | 34.22 | 0.51 | 98 | | | | | | | |

63.52 CREST; October 20, 1952; 0150 GCT; 37°19'N, 122°36'W; sounding, 40 fm; wind, 350°, force 5; weather, fog; sea, moderate; wire angle, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.28 | 33.21 | 6.15 | 299 | 0 | 13.28 | 33.21 | 6.15 | 24.97 | 299 | 0.00 |
| 9 | 13.18 | 33.17 | 6.19 | 300 | 10 | 13.17 | 33.17 | 6.18 | 24.96 | 300 | 0.03 |
| 19 | 13.05 | 33.19 | 6.13 | 296 | 20 | 13.03 | 33.20 | 6.14 | 25.01 | 295 | 0.06 |
| 28 | 11.96 | 33.30 | 5.87 | 268 | | | | | | | |

63.55 CREST; October 20, 1952; 0250 GCT; 37°14'N, 122°50.5'W; sounding, 155 fm; wind, 340°, force 4; weather, fog; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.23 | 33.06 | 5.90 | 329 | 0 | 14.23 | 33.06 | 5.90 | 24.66 | 329 | 0.00 |
| 10 | 14.20 | 33.12 | 6.13 | 324 | 10 | 14.20 | 33.12 | 6.13 | 24.71 | 324 | 0.03 |
| 25 | 10.69 | 33.13 | 5.70 | 259 | 20 | 11.30 | 33.13 | 5.89 | 25.29 | 269 | 0.06 |
| 50 | 10.02 | 33.26 | 4.84 | 238 | 30 | 10.58 | 33.14 | 5.50 | 25.42 | 256 | 0.09 |
| 74 | 9.65 | 33.48 | 4.37 | 216 | 50 | 10.02 | 33.26 | 4.84 | 25.61 | 238 | 0.14 |
| 98 | 9.51 | 33.62 | 3.69 | 204 | 75 | 9.64 | 33.49 | 4.33 | 25.85 | 215 | 0.20 |
| 123 | 8.70 | 33.73 | 2.89 | 183 | 100 | 9.49 | 33.63 | 3.61 | 25.99 | 203 | 0.25 |
| 153 | 8.28 | 33.86 | 2.78 | 168 | 150 | 8.30 | 33.85 | 2.79 | 26.35 | 169 | 0.34 |

67.55 CREST; October 20, 1952; 0709 GCT; 36°39'N, 122°26'W; sounding, 1150 fm; wind, 340°, force 5; weather, fog; sea, slight; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.36 | 33.10 | 5.97 | 328 | 0 | 14.36 | 33.10 | 5.97 | 24.67 | 328 | 0.00 |
| 10 | 14.36 | 33.12 | 5.91 | 327 | 10 | 14.36 | 33.12 | 5.91 | 24.68 | 327 | 0.03 |
| 20 | 14.24 | 33.08 | 6.03 | 328 | 20 | 14.24 | 33.08 | 6.03 | 24.68 | 328 | 0.07 |
| 35 | 12.40 | 33.15 | 5.81 | 287 | 30 | 13.20 | 33.10 | 5.97 | 24.90 | 306 | 0.10 |
| 50 | 11.15 | 33.37 | 5.01 | 249 | 50 | 11.15 | 33.37 | 5.01 | 25.50 | 249 | 0.15 |
| 64 | 10.54 | 33.42 | 4.66 | 235 | 75 | 9.89 | 33.45 | 4.32 | 25.78 | 222 | 0.21 |
| 78 | 9.82 | 33.46 | 4.26 | 220 | 100 | 9.50 | 33.75 | 3.00 | 26.08 | 194 | 0.26 |
| 98 | 9.56 | 33.73 | 3.07 | 196 | 150 | 8.94 | 33.95 | 2.12 | 26.33 | 171 | 0.36 |
| 122 | 9.18 | 33.86 | 2.48 | 181 | 200 | 8.62 | 34.06 | 1.81 | 26.46 | 158 | 0.44 |
| 150 | 8.94 | 33.95 | 2.12 | 171 | 250 | 8.34 | 34.14 | 1.50 | 26.57 | 148 | 0.52 |
| 196 | 8.64 | 34.05 | 1.84 | 159 | 300 | 7.82 | 34.14 | 1.43 | 26.65 | 140 | 0.59 |
| 242 | 8.42 | 34.14 | 1.52 | 149 | 400 | 6.81 | 34.18 | 0.98 | 26.82 | 124 | 0.73 |
| 288 | 7.93 | 34.14 | 1.48 | 142 | 500 | 5.60 | 34.15 | 0.97 | 26.95 | 111 | 0.85 |
| 385 | 7.00 | 34.18 | 0.97 | 126 | 600 | (5.35) | (34.16) | | (26.99) | (108) | (0.97) |
| 479 | 5.70 | 34.14 | 1.00 | 113 | | | | | | | |
| 581 | 5.38 | 34.25 | 0.55 | 101 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

CREST; October 20, 1952; 1154 GCT; 36°19'N, 123°09'W; sounding, 1750 fm; wind, 330°, force 5; weather, fog; sea, slight; wire angle, 10°. 67.65

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.43 | 33.19 | 6.08 | 323 | 0 | 14.43 | 33.19 | 6.08 | 24.72 | 323 | 0.00 |
| 10 | 14.48 | 33.21 | 6.08 | 323 | 10 | 14.48 | 33.21 | 6.08 | 24.73 | 323 | 0.03 |
| 20 | 14.27 | 33.31 | 6.03 | 311 | 20 | 14.27 | 33.31 | 6.03 | 24.85 | 311 | 0.06 |
| 35 | 12.19 | 33.37 | 5.73 | 267 | 30 | 12.74 | 33.35 | 5.89 | 25.19 | 279 | 0.09 |
| 54 | 10.68 | 33.48 | 4.46 | 233 | 50 | 11.05 | 33.47 | 4.64 | 25.60 | 240 | 0.15 |
| 68 | 9.64 | 33.49 | 3.97 | 215 | 75 | 9.54 | 33.54 | 3.50 | 25.91 | 210 | 0.20 |
| 83 | 9.43 | 33.66 | 3.28 | 200 | 100 | 8.84 | 33.71 | 3.12 | 26.15 | 187 | 0.25 |
| 107 | 8.72 | 33.73 | 3.08 | 184 | 150 | 8.26 | 33.94 | 2.60 | 26.42 | 161 | 0.34 |
| 130 | 8.52 | 33.93 | 2.67 | 166 | 200 | 7.92 | 34.02 | 2.27 | 26.54 | 151 | 0.42 |
| 159 | 8.18 | 33.94 | 2.55 | 160 | 250 | 7.82 | 34.15 | 1.63 | 26.65 | 139 | 0.49 |
| 211 | 7.88 | 34.05 | 2.18 | 148 | 300 | 7.34 | 34.20 | 1.19 | 26.76 | 129 | 0.56 |
| 266 | 7.76 | 34.18 | 1.40 | 136 | 400 | 6.35 | 34.24 | 0.80 | 26.93 | 113 | 0.69 |
| 312 | 7.20 | 34.20 | 1.15 | 127 | 500 | 5.70 | 34.28 | 0.59 | 27.04 | 103 | 0.80 |
| 419 | 6.19 | 34.25 | 0.71 | 111 | 600 | 5.10 | 34.34 | 0.42 | 27.16 | 91 | 0.91 |
| 524 | 5.56 | 34.29 | 0.56 | 100 | | | | | | | |
| 630 | 4.92 | 34.36 | 0.31 | 88 | | | | | | | |

CREST; October 21, 1952; 0552 GCT; 35°52'N, 122°23'W; sounding, missing; wind, 330°, force 5; weather, overcast; sea, slight; wire angle, 26°. 70.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.62 | 33.27 | 6.09 | 301 | 0 | 13.62 | 33.27 | 6.09 | 24.95 | 301 | 0.00 |
| 8 | 13.57 | 33.27 | 6.01 | 300 | 10 | 13.55 | 33.27 | 6.01 | 24.96 | 300 | 0.03 |
| 22 | 13.30 | 33.30 | 6.00 | 293 | 20 | 13.35 | 33.30 | 6.00 | 25.03 | 294 | 0.06 |
| 45 | 12.26 | 33.26 | 5.48 | 277 | 30 | 13.10 | 33.29 | 5.94 | 25.07 | 290 | 0.09 |
| 67 | 10.42 | 33.57 | 3.76 | 222 | 50 | 11.60 | 33.28 | 4.50 | 25.35 | 263 | 0.14 |
| 89 | 9.56 | 33.57 | 3.62 | 208 | 75 | 10.07 | 33.57 | 3.69 | 25.85 | 216 | 0.20 |
| 136 | 8.70 | 33.95 | 2.48 | 167 | 100 | 9.30 | 33.63 | 3.51 | 26.02 | 200 | 0.26 |
| 178 | 8.40 | 34.05 | 2.01 | 155 | 150 | 8.60 | 34.00 | 2.21 | 26.42 | 162 | 0.35 |
| 220 | 7.80 | 34.09 | 1.91 | 144 | 200 | 8.03 | 34.07 | 1.98 | 26.56 | 148 | 0.43 |
| 262 | 7.57 | 34.16 | 1.45 | 135 | 250 | 7.63 | 34.14 | 1.60 | 26.67 | 138 | 0.50 |
| 351 | 6.16 | 34.11 | 1.22 | 121 | 300 | 7.03 | 34.16 | 1.33 | 26.77 | 128 | 0.57 |
| 436 | 5.65 | 34.18 | 0.75 | 109 | 400 | 5.88 | 34.14 | 0.96 | 26.91 | 115 | 0.70 |
| 528 | 5.09 | 34.25 | 0.52 | 98 | 500 | 5.21 | 34.23 | 0.58 | 27.06 | 101 | 0.81 |
| 709 | 4.66 | 34.40 | 0.35 | 82 | 600 | 4.89 | 34.31 | 0.46 | 27.16 | 91 | 0.91 |
| 895 | 4.08 | 34.51 | 0.46 | 68 | 700 | 4.69 | 34.39 | 0.35 | 27.25 | 83 | 1.01 |
| 1093 | 3.54 | 34.54 | 0.64 | 60 | 800 | 4.39 | 34.46 | 0.40 | 27.34 | 75 | 1.09 |
| | | | | | 1000 | 3.81 | 34.53 | 0.55 | 27.45 | 64 | 1.25 |

CREST; October 21, 1952; 0013 GCT; 35°33'N, 123°06'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 18°. 70.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.67 | 32.97 | 5.28 | 387 | 0 | 16.67 | 32.97 | 5.28 | 24.06 | 387 | 0.00 |
| 9 | 16.63 | 32.97 | 5.25 | 386 | 10 | 16.63 | 32.97 | 5.26 | 24.07 | 386 | 0.04 |
| 19 | 14.12 | 32.83 | 5.45 | 344 | 20 | 14.05 | 32.83 | 5.45 | 24.52 | 342 | 0.08 |
| 33 | 12.22 | 32.99 | 3.76 | 296 | 30 | 12.60 | 32.98 | 3.77 | 24.93 | 303 | 0.11 |
| 52 | 10.66 | 32.90 | 4.69 | 275 | 50 | 10.81 | 32.90 | 4.67 | 25.20 | 278 | 0.17 |
| 66 | 10.05 | 33.19 | 4.48 | 244 | 75 | 10.31 | 33.50 | 3.93 | 25.75 | 225 | 0.23 |
| 80 | 10.38 | 33.57 | 3.29 | 221 | 100 | 9.56 | 33.72 | 2.28 | 26.05 | 197 | 0.28 |
| 104 | 9.46 | 33.75 | 2.26 | 193 | 150 | 9.04 | 33.97 | 2.00 | 26.33 | 171 | 0.38 |
| 127 | 9.20 | 34.23u | 2.53 | | 200 | 8.70 | 34.15 | 1.69 | 26.52 | 152 | 0.46 |
| 155 | 9.00 | 33.99 | 1.89 | 168 | 250 | 8.32 | 34.24 | 1.33 | 26.65 | 140 | 0.53 |
| 205 | 8.64 | 34.16 | 1.68 | 151 | 300 | 7.64 | 34.20 | 1.49 | 26.72 | 133 | 0.60 |
| 258 | 8.25 | 34.25 | 1.31 | 138 | 400 | 6.89 | 34.29 | 0.76 | 26.90 | 117 | 0.73 |
| 303 | 7.60 | 34.20 | 1.50 | 133 | 500 | 5.68 | 34.23 | 0.61 | 27.01 | 106 | 0.85 |
| 405 | 6.82 | 34.29 | 0.74 | 116 | 600 | 5.24 | 34.32 | 0.34 | 27.13 | 94 | 0.96 |
| 508 | 5.62 | 34.23 | 0.60 | 105 | | | | | | | |
| 614 | 5.20 | 34.34 | 0.31 | 92 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **70.80** | CREST; October 20, 1952; 1911 GCT; 35°17'N, 123°46'W; sounding, 2000 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 16.47 | 33.04 | 5.60 | 377 | 0 | 16.47 | 33.04 | 5.60 | 24.16 | 377 | 0.00 |
| 9 | 16.34 | 33.01 | 5.68 | 376 | 10 | 16.32 | 33.01 | 5.69 | 24.17 | 376 | 0.04 |
| 23 | 15.61 | 33.26 | 5.91 | 343 | 20 | 15.65 | 33.25 | 5.90 | 24.50 | 344 | 0.07 |
| 46 | 12.88 | 33.08 | 6.00 | 301 | 30 | 15.52 | 33.24 | 5.98 | 24.52 | 342 | 0.11 |
| 69 | 10.44 | 33.12 | 5.23 | 256 | 50 | 11.70 | 33.09 | 5.98 | 25.18 | 279 | 0.17 |
| 91 | 10.18 | 33.49 | 4.29 | 224 | 75 | 10.38 | 33.20 | 4.92 | 25.50 | 249 | 0.24 |
| 137 | 8.66 | 33.84 | 2.78 | 175 | 100 | 9.92 | 33.57 | 4.00 | 25.87 | 214 | 0.30 |
| 179 | 8.04 | 33.95 | 2.51 | 157 | 150 | 8.42 | 33.88 | 2.63 | 26.35 | 168 | 0.39 |
| 222 | 7.69 | 34.07 | 2.14 | 144 | 200 | 7.90 | 34.01 | 2.36 | 26.53 | 151 | 0.47 |
| 264 | 7.19 | 34.11 | 1.82 | 134 | 250 | 7.36 | 34.10 | 1.92 | 26.68 | 137 | 0.55 |
| 353 | 6.25 | 34.14 | 1.30 | 120 | 300 | 6.79 | 34.12 | 1.60 | 26.78 | 128 | 0.62 |
| 438 | 5.88 | 34.23 | 0.70 | 108 | 400 | 6.01 | 34.18 | 1.00 | 26.93 | 114 | 0.74 |
| 528 | 5.68 | 34.33 | 0.45 | 99 | 500 | 5.76 | 34.30 | 0.49 | 27.05 | 102 | 0.85 |
| 704 | 4.82 | 34.42 | 0.40 | 82 | 600 | 5.34 | 34.38 | 0.43 | 27.17 | 91 | 0.96 |
| 880 | 4.25 | 34.47 | 0.46 | 73 | 700 | 4.85 | 34.42 | 0.41 | 27.25 | 83 | 1.05 |
| 1072 | 3.69 | 34.54 | 0.71 | 62 | 800 | 4.50 | 34.45 | 0.42 | 27.32 | 77 | 1.14 |
| | | | | | 1000 | 3.90 | 34.51 | 0.60 | 27.43 | 66 | 1.30 |
| **73.50** | CREST; October 21, 1952; 1613 GCT; 35°36.5'N, 121°17.5'W; sounding, 60 fm; wind, 230°, force 2; weather, fog; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 12.14 | 33.33 | 5.31 | 269 | 0 | 12.14 | 33.33 | 5.31 | 25.29 | 269 | 0.00 |
| 10 | 12.14 | 33.38 | 5.23 | 266 | 10 | 12.14 | 33.38 | 5.23 | 25.33 | 266 | 0.03 |
| 20 | 11.98 | 33.40 | 5.08 | 261 | 20 | 11.98 | 33.40 | 5.08 | 25.37 | 261 | 0.05 |
| 30 | 11.96 | 33.40 | 5.04 | 261 | 30 | 11.96 | 33.40 | 5.04 | 25.38 | 261 | 0.08 |
| 50 | 10.92 | 33.55 | 3.89 | 232 | 50 | 10.92 | 33.55 | 3.89 | 25.68 | 232 | 0.13 |
| 75 | 10.42 | 33.64 | 3.31 | 217 | 75 | 10.42 | 33.64 | 3.31 | 25.84 | 217 | 0.19 |
| **73.60** | CREST; October 21, 1952; 1042, 1053 GCT; 35°18'N, 121°58'W; sounding, 1000 fm; wind, 340°, force 5; weather, overcast; sea, moderate; wire angle, 20°, 20°. | | | | | | | | | | |
| 0 | 14.26 | 33.31 | 5.77 | 311 | 0 | 14.26 | 33.31 | 5.77 | 24.85 | 311 | 0.00 |
| 10 | 14.25 | 33.33 | 6.00 | 309 | 10 | 14.25 | 33.33 | 6.00 | 24.87 | 309 | 0.03 |
| | | | | | 20 | 14.10 | 33.30 | 5.56 | 24.87 | 309 | 0.06 |
| 12 | 14.24 | 33.31 | 5.77 | 311 | 30 | 13.67 | 33.31 | 5.56 | 24.97 | 299 | 0.09 |
| 24 | 13.93 | 33.30 | 5.54 | 305 | 50 | 11.50 | 33.34 | 5.47 | 25.41 | 257 | 0.15 |
| 41 | 13.01 | 33.33 | 5.56 | 285 | 75 | 9.35 | 33.53 | 3.90 | 25.93 | 208 | 0.21 |
| 52 | 11.26 | 33.35 | 5.43 | 252 | 100 | 9.20 | 33.71 | 3.03 | 26.10 | 192 | 0.26 |
| 65 | 10.48 | 33.44 | 4.62 | 233 | 150 | 8.19 | 33.90 | 2.70 | 26.40 | 163 | 0.35 |
| 88 | 9.58 | 33.64 | 3.35 | 203 | 200 | 7.45 | 33.97 | 2.80 | 26.57 | 148 | 0.43 |
| 108 | 8.94 | 33.75 | 2.92 | 185 | 250 | 7.20 | 34.05 | 2.07 | 26.66 | 138 | 0.50 |
| 134 | 8.50 | 33.86 | 2.64 | 171 | 300 | 6.93 | 34.16 | 1.47 | 26.79 | 127 | 0.57 |
| 180 | 7.68 | 33.95 | 2.90 | 152 | 400 | 6.25 | 34.25 | 0.88 | 26.95 | 111 | 0.69 |
| 230 | 7.25 | 34.00 | 2.39 | 143 | 500 | 5.83 | 34.33 | 0.49 | 27.07 | 100 | 0.80 |
| 274 | 7.11 | 34.13 | 1.77 | 131 | | | | | | | |
| 372 | 6.34 | 34.22 | 1.01 | 115 | | | | | | | |
| 470 | 5.98 | 34.31 | 0.58 | 104 | | | | | | | |
| 574 | 5.46 | 34.35 | 0.40 | 95 | | | | | | | |
| **77.55** | CREST; October 21, 1952; 2038 GCT; 37°52.5'N, 121°17.5'W; sounding, 200 fm; wind, 330°, force 4; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 13.99 | 33.27 | 5.68 | 309 | 0 | 13.99 | 33.27 | 5.68 | 24.87 | 309 | 0.00 |
| 10 | 13.58 | 33.30 | 5.78 | 298 | 10 | 13.58 | 33.30 | 5.78 | 24.98 | 298 | 0.03 |
| 25 | 13.25 | 33.30 | 5.78 | 292 | 20 | 13.40 | 33.30 | 5.78 | 25.02 | 295 | 0.06 |
| 50 | 11.81 | 33.33 | 5.28 | 263 | 30 | 13.10 | 33.30 | 5.72 | 25.08 | 289 | 0.09 |
| 73 | 10.00 | 33.35 | 4.39 | 231 | 50 | 11.81 | 33.33 | 5.28 | 25.35 | 263 | 0.14 |
| 98 | 9.18 | 33.35 | 4.26 | 219 | 75 | 9.93 | 33.35 | 4.36 | 25.70 | 230 | 0.21 |
| 150 | 8.95 | 33.66 | 3.35 | 192 | 100 | 9.17 | 33.36 | 4.24 | 25.83 | 218 | 0.26 |
| 195 | 8.73 | 33.98 | 2.18 | 165 | 150 | 8.95 | 33.66 | 3.35 | 26.10 | 192 | 0.37 |
| 242 | 8.09 | 34.09 | 1.89 | 148 | 200 | 8.70 | 34.00 | 2.13 | 26.40 | 163 | 0.46 |
| 288 | 7.54 | 34.13 | 1.51 | 137 | 250 | 8.00 | 34.10 | 1.83 | 26.59 | 146 | 0.54 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; October 22, 1952; 0124 GCT; 34°34'N, 121°55'W; sounding, missing; wind, 350°, force 4; weather, overcast; sea, slight; wire angle, 15°. | | | | | | | | | | | 77.65 |
| 0 | 15.78 | 33.09 | 5.68 | 359 | 0 | 15.78 | 33.09 | 5.68 | 24.35 | 359 | 0.00 |
| 10 | 15.78 | 33.09 | 5.76 | 359 | 10 | 15.78 | 33.09 | 5.76 | 24.35 | 359 | 0.04 |
| 19 | 15.69 | 33.12 | 5.75 | 354 | 20 | 15.68 | 33.12 | 5.75 | 24.40 | 354 | 0.07 |
| 33 | 12.88 | 32.99 | 6.24 | 308 | 30 | 14.80 | 33.00 | 6.20 | 24.50 | 345 | 0.11 |
| 48 | 10.92 | 32.97 | 5.78 | 275 | 50 | 10.85 | 32.97 | 5.70 | 25.24 | 273 | 0.17 |
| 62 | 10.04 | 33.05 | 5.30 | 254 | 75 | 9.47 | 33.31 | 4.35 | 25.74 | 226 | 0.23 |
| 76 | 9.46 | 33.31 | 4.32 | 226 | 100 | 9.16 | 33.59 | 3.58 | 26.01 | 201 | 0.29 |
| 94 | 9.24 | 33.55 | 3.65 | 205 | 150 | 8.33 | 33.81 | 3.59 | 26.31 | 172 | 0.38 |
| 118 | 8.86 | 33.65 | 3.48 | 192 | 200 | 7.97 | 33.95 | 2.56 | 26.48 | 156 | 0.46 |
| 145 | 8.36 | 33.78 | 3.61 | 175 | 250 | 7.54 | 34.04 | 2.30 | 26.61 | 144 | 0.54 |
| 191 | 8.06 | 33.93 | 2.65 | 159 | 300 | 7.19 | 34.10 | 1.41 | 26.71 | 135 | 0.61 |
| 237 | 7.62 | 34.02 | 2.40 | 146 | 400 | 6.21 | 34.13 | 1.18 | 26.86 | 120 | 0.74 |
| 283 | 7.33 | 34.09 | 1.48 | 137 | 500 | 5.65 | 34.19 | 0.58 | 26.98 | 109 | 0.86 |
| 383 | 6.34 | 34.13 | 1.26 | 122 | | | | | | | |
| 478 | 5.75 | 34.17 | 0.68 | 111 | | | | | | | |
| 579 | 5.42 | 34.27 | 0.43 | 100 | | | | | | | |
| CREST; October 15, 1952; 2107 GCT; 34°26.5'N, 120°32.5'W; sounding, 50 fm; wind, 340°, force 6; weather, cloudy; sea, rough; wire angle, 15°. | | | | | | | | | | | 80.51 |
| 0 | 13.84 | 33.39 | 5.77 | 297 | 0 | 13.84 | 33.39 | 5.77 | 25.00 | 297 | 0.00 |
| 9 | 13.22 | 33.35 | 5.59 | 288 | 10 | 12.90 | 33.35 | 5.55 | 25.16 | 282 | 0.03 |
| 19 | 11.14 | 33.37 | 4.65 | 249 | 20 | 11.00 | 33.38 | 4.52 | 25.54 | 246 | 0.06 |
| 28 | 10.86 | 33.44 | 4.17 | 239 | 30 | 10.84 | 33.45 | 4.14 | 25.62 | 238 | 0.08 |
| 48 | 10.51 | 33.52 | 3.83 | 227 | 50 | 10.48 | 33.53 | 3.78 | 25.74 | 226 | 0.13 |
| 72 | 10.11 | 33.61 | 3.29 | 214 | 75 | (10.08) | (33.62) | (3.25) | (25.88) | (213) | (0.18) |
| CREST; October 15, 1952; 2331 GCT; 34°19'N, 120°48'W; sounding, 400 fm; wind, 330°, force 5; weather, overcast; sea, rough; wire angle, 14°. | | | | | | | | | | | 80.55 |
| 0 | 12.94 | 33.42 | 5.47 | 277 | 0 | 12.94 | 33.42 | 5.47 | 25.20 | 277 | 0.00 |
| 8 | 12.78 | 33.46 | 5.61 | 272 | 10 | 12.70 | 33.46 | 5.62 | 25.28 | 270 | 0.03 |
| 18 | 12.54 | 33.42 | 5.65 | 270 | 20 | 12.54 | 33.42 | 5.63 | 25.28 | 270 | 0.05 |
| 34 | 12.55 | 33.42 | 5.24 | 270 | 30 | 12.55 | 33.42 | 5.35 | 25.28 | 270 | 0.08 |
| 48 | 10.55 | 33.12 | 5.13 | 257 | 50 | 10.40 | 33.12 | 5.10 | 25.44 | 255 | 0.13 |
| 63 | 9.42 | 33.31 | 4.48 | 225 | 75 | 9.33 | 33.56 | 3.88 | 25.96 | 205 | 0.19 |
| 77 | 9.32 | 33.57 | 3.86 | 205 | 100 | 9.08 | 33.77 | 3.20 | 26.16 | 186 | 0.24 |
| 97 | 9.13 | 33.75 | 3.29 | 188 | 150 | 9.04 | 34.09 | 2.15 | 26.42 | 162 | 0.33 |
| 120 | 8.76 | 33.89 | 2.79 | 172 | 200 | 8.19 | 34.09 | 2.16 | 26.55 | 149 | 0.41 |
| 146 | 9.05 | 34.09 | 2.14 | 162 | 250 | 7.87 | 34.18 | 1.50 | 26.67 | 138 | 0.48 |
| 191 | 8.36 | 34.09 | 2.20 | 152 | 300 | 7.72 | 34.23 | 1.16 | 26.73 | 132 | 0.55 |
| 236 | 7.86 | 34.14 | 1.75 | 141 | 400 | 6.25 | 34.19 | 1.05 | 26.90 | 116 | 0.68 |
| 278 | 7.90 | 34.24 | 1.15 | 134 | 500 | 5.97 | 34.27 | 0.58 | 27.00 | 107 | 0.80 |
| 373 | 6.38 | 34.17 | 1.18 | 119 | | | | | | | |
| 465 | 6.08 | 34.25 | 0.69 | 109 | | | | | | | |
| 568 | 5.77 | 34.31 | 0.44 | 101 | | | | | | | |
| CREST; October 16, 1952; 0236 GCT; 34°09'N, 121°09'W; sounding, 1200 fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 28°. | | | | | | | | | | | 80.60 |
| 0 | 14.13 | 33.24 | 5.86 | 314 | 0 | 14.13 | 33.24 | 5.86 | 24.82 | 314 | 0.00 |
| 8 | 14.12 | 33.22 | 5.87 | 315 | 10 | 14.12 | 33.22 | 5.87 | 24.81 | 315 | 0.03 |
| 22 | 14.10 | 33.22 | 5.87 | 315 | 20 | 14.10 | 33.22 | 5.87 | 24.81 | 315 | 0.06 |
| 49 | 10.92 | 33.57 | 4.21 | 230 | 30 | 14.08 | 33.23 | 5.80 | 24.82 | 313 | 0.09 |
| 70 | 10.55 | 33.69 | 3.46 | 215 | 50 | 10.89 | 33.58 | 4.14 | 25.71 | 229 | 0.15 |
| 94 | 9.31 | 33.95 | 2.59 | 176 | 75 | 10.25 | 33.74 | 3.25 | 25.95 | 207 | 0.20 |
| 136 | 9.11 | 34.16 | 2.05 | 158 | 100 | 9.27 | 34.00 | 2.45 | 26.31 | 172 | 0.25 |
| 178 | 8.77 | 34.23 | 1.82 | 147 | 150 | 9.00 | 34.19 | 1.96 | 26.50 | 154 | 0.33 |
| 224 | 8.66 | 34.25 | 1.58 | 144 | 200 | 8.72 | 34.24 | 1.70 | 26.59 | 146 | 0.41 |
| 263 | 8.53 | 34.27 | 1.36 | 141 | 250 | 8.60 | 34.26 | 1.43 | 26.62 | 142 | 0.48 |
| 353 | 8.08 | 34.32 | 0.96 | 130 | 300 | 8.32 | 34.29 | 1.18 | 26.69 | 136 | 0.56 |
| 440 | 7.78 | 34.30 | 0.81 | 128 | 400 | 7.92 | 34.31 | 0.86 | 26.76 | 129 | 0.70 |
| 527 | 7.11 | 34.31 | 0.71 | 118 | 500 | 7.36 | 34.30 | 0.74 | 26.84 | 122 | 0.83 |
| 705 | 5.44 | 34.52 | 0.38 | 82 | 600 | 6.37 | 34.39 | 0.57 | 27.04 | 102 | 0.95 |
| 892 | 4.43 | 34.45 | 0.43 | 76 | 700 | 5.48 | 34.52 | 0.39 | 27.26 | 82 | 1.05 |
| 1080 | 3.70 | 34.52 | 0.61 | 63 | 800 | 4.87 | 34.48 | 0.41 | 27.30 | 78 | 1.14 |
| | | | | | 1000 | 4.02 | 34.48 | 0.53 | 27.39 | 69 | 1.30 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 80.70 | CREST; October 16, 1952; 0802 GCT; 33°49'N, 121°51'W; sounding, 2000 fm; wind, 330°, force 5; weather, overcast; sea, rough; wire angle, 17°. | | | | | | | | | | |
| 0 | 15.95 | 33.12 | 5.31 | 360 | 0 | 15.95 | 33.12 | 5.31 | 24.34 | 360 | 0.00 |
| 8 | 15.91 | 33.12 | 5.30 | 359 | 10 | 15.90 | 33.12 | 5.35 | 24.35 | 359 | 0.04 |
| 18 | 15.82 | 33.12 | 5.47 | 357 | 20 | 15.79 | 33.12 | 5.46 | 24.37 | 357 | 0.07 |
| 33 | 15.59 | 33.13 | 5.51 | 352 | 30 | 15.64 | 33.13 | 5.51 | 24.41 | 353 | 0.11 |
| 52 | 11.80 | 32.88 | 6.01 | 296 | 50 | 12.20 | 32.89 | 6.00 | 24.94 | 303 | 0.17 |
| 66 | 10.87 | 32.86 | 5.86 | 282 | 75 | 10.40 | 32.87 | 5.65 | 25.24 | 273 | 0.25 |
| 79 | 10.22 | 33.01 | 5.57 | 260 | 100 | 9.42 | 33.30 | 4.45 | 25.74 | 226 | 0.31 |
| 101 | 9.41 | 33.31 | 4.43 | 225 | 150 | 9.40 | 34.08 | 1.91 | 26.35 | 168 | 0.41 |
| 122 | 9.69 | 33.68 | 3.32 | 202 | 200 | 8.94 | 34.21 | 1.71 | 26.53 | 151 | 0.49 |
| 146 | 9.45 | 34.05 | 1.96 | 171 | 250 | 8.32 | 34.21 | 1.47 | 26.63 | 142 | 0.56 |
| 190 | 9.02 | 34.20 | 1.77 | 153 | 300 | 7.42 | 34.16 | 1.50 | 26.72 | 133 | 0.64 |
| 238 | 8.54 | 34.23 | 1.44 | 144 | 400 | 6.38 | 34.19 | 0.95 | 26.89 | 118 | 0.77 |
| 280 | 7.70 | 34.16 | 1.53 | 137 | 500 | 5.82 | 34.25 | 0.51 | 27.00 | 106 | 0.88 |
| 377 | 6.57 | 34.18 | 1.08 | 121 | 600 | (5.62) | (34.37) | | (27.12) | (95) | (0.99) |
| 476 | 5.90 | 34.23 | 0.60 | 109 | | | | | | | |
| 580 | 5.66 | 34.36 | 0.34 | 96 | | | | | | | |
| 80.80 | CREST; October 16, 1952; 1322 GCT; 33°29'N, 122°33'W; sounding, 2000 fm; wind, 330°, force 5; weather, cloudy; sea, moderate; wire angle, 18°. | | | | | | | | | | |
| 0 | 17.52 | 33.15 | 5.41 | 393 | 0 | 17.52 | 33.15 | 5.41 | 23.99 | 393 | 0.00 |
| 9 | 17.52 | 33.13 | 5.38 | 394 | 10 | 17.52 | 33.13 | 5.36 | 23.98 | 394 | 0.04 |
| 23 | 17.52 | 33.12 | 5.40 | 395 | 20 | 17.52 | 33.12 | 5.39 | 23.97 | 395 | 0.08 |
| 50 | 15.48 | 32.94 | 5.90 | 363 | 30 | 17.52 | 33.11 | 5.46 | 23.96 | 395 | 0.12 |
| 73 | 13.21 | 33.04 | 6.03 | 310 | 50 | 15.48 | 32.94 | 5.90 | 24.30 | 363 | 0.19 |
| 98 | 11.60 | 32.99 | 5.79 | 285 | 75 | 13.12 | 33.04 | 6.03 | 24.87 | 309 | 0.28 |
| 143 | 9.42 | 33.30 | 4.62 | 226 | 100 | 11.43 | 32.99 | 5.74 | 25.16 | 282 | 0.35 |
| 187 | 8.64 | 33.80 | 3.23 | 177 | 150 | 9.31 | 33.35 | 4.46 | 25.80 | 221 | 0.48 |
| 236 | 7.86 | 34.00 | 3.18 | 151 | 200 | 8.43 | 33.91 | 3.22 | 26.37 | 166 | 0.58 |
| 276 | 7.20 | 34.03 | 2.71 | 140 | 250 | 7.54 | 34.01 | 3.06 | 26.58 | 146 | 0.66 |
| 369 | 6.78 | 34.18 | 1.30 | 123 | 300 | 7.06 | 34.06 | 2.24 | 26.69 | 136 | 0.73 |
| 458 | 6.15 | 34.23 | 0.70 | 112 | 400 | 6.55 | 34.21 | 1.00 | 26.88 | 118 | 0.86 |
| 547 | 5.60 | 34.31 | 0.46 | 99 | 500 | 5.88 | 34.26 | 0.56 | 27.00 | 106 | 0.98 |
| 720 | 4.88 | 34.40 | 0.30 | 84 | 600 | 5.36 | 34.35 | 0.39 | 27.14 | 93 | 1.09 |
| 902 | 4.19 | 34.49 | 0.41 | 70 | 700 | 4.95 | 34.39 | 0.31 | 27.22 | 86 | 1.19 |
| 1081 | 3.69 | 34.51 | 0.69 | 64 | 800 | 4.56 | 34.43 | 0.33 | 27.30 | 79 | 1.28 |
| | | | | | 1000 | 3.90 | 34.51 | 0.55 | 27.43 | 66 | 1.44 |
| 80.90 | CREST; October 16, 1952; 1845 GCT; 33°09'N, 123°13'W; sounding, 2150 fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 17.90 | 33.19 | 5.68 | 398 | 0 | 17.90 | 33.19 | 5.68 | 23.93 | 398 | 0.00 |
| 9 | 17.88 | 33.19 | 5.53 | 398 | 10 | 17.88 | 33.19 | 5.53 | 23.94 | 398 | 0.04 |
| 19 | 17.88 | 33.19 | 5.70 | 398 | 20 | 17.88 | 33.19 | 5.71 | 23.94 | 398 | 0.08 |
| 34 | 17.92 | 33.18 | 5.74 | 400 | 30 | 17.91 | 33.18 | 5.74 | 23.92 | 399 | 0.12 |
| 48 | 16.91 | 33.04 | 5.84 | 387 | 50 | 16.70 | 33.04 | 6.00 | 24.10 | 382 | 0.20 |
| 63 | 14.65 | 33.03 | 6.43 | 339 | 75 | 12.37 | 32.90 | 6.18 | 24.91 | 305 | 0.28 |
| 77 | 12.18 | 32.90 | 6.18 | 302 | 100 | 10.98 | 32.96 | 6.28 | 25.21 | 276 | 0.36 |
| 96 | 11.12 | 32.94 | 6.32 | 280 | 150 | 9.30 | 33.40 | 4.50 | 25.84 | 217 | 0.48 |
| 119 | 10.29 | 33.12 | 5.27 | 253 | 200 | 8.62 | 33.81 | 3.06 | 26.27 | 176 | 0.58 |
| 147 | 9.36 | 33.37 | 4.59 | 220 | 250 | 7.93 | 34.02 | 2.47 | 26.54 | 151 | 0.67 |
| 193 | 8.72 | 33.78 | 3.14 | 180 | 300 | 7.47 | 34.12 | 1.85 | 26.68 | 137 | 0.74 |
| 237 | 8.04 | 33.98 | 2.65 | 155 | 400 | 6.48 | 34.15 | 1.08 | 26.84 | 122 | 0.87 |
| 284 | 7.62 | 34.11 | 2.00 | 140 | 500 | 5.71 | 34.25 | 0.60 | 27.02 | 105 | 0.99 |
| 379 | 6.64 | 34.13 | 1.25 | 125 | | | | | | | |
| 469 | 5.95 | 34.23 | 0.53 | 109 | | | | | | | |
| 571 | 5.24 | 34.29 | 0.79 | 97 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; October 16, 1952; 2352 GCT; 32°48'N, 123°54'W; sounding, 2000 fm; wind, 360°, force 3; weather, partly cloudy; sea, slight; wire angle, 04°. | | | | | | | | | | | 80.100 |
| 0 | 18.35 | 33.30 | 5.30 | 401 | 0 | 18.35 | 33.30 | 5.30 | 23.91 | 401 | 0.00 |
| 10 | 18.22 | 33.31 | 5.31 | 397 | 10 | 18.22 | 33.31 | 5.31 | 23.95 | 397 | 0.04 |
| 25 | 18.19 | 33.30 | 5.33 | 397 | 20 | 18.20 | 33.30 | 5.32 | 23.94 | 397 | 0.08 |
| 50 | 15.68 | 33.31 | 6.01 | 340 | 30 | 18.18 | 33.30 | 5.45 | 23.95 | 397 | 0.12 |
| 74 | 13.99 | 33.33 | 6.01 | 304 | 50 | 15.68 | 33.31 | 6.01 | 24.54 | 340 | 0.19 |
| 98 | 13.22 | 33.33 | 5.80 | 289 | 75 | 13.98 | 33.33 | 6.01 | 24.92 | 304 | 0.27 |
| 149 | 10.26 | 33.24 | 5.24 | 244 | 100 | 13.08 | 33.33 | 5.76 | 25.10 | 287 | 0.35 |
| 196 | 8.80 | 33.58 | 4.29 | 196 | 150 | 10.22 | 33.24 | 5.22 | 25.56 | 243 | 0.48 |
| 243 | 8.01 | 33.95 | 3.38 | 157 | 200 | 8.72 | 33.62 | 4.17 | 26.10 | 192 | 0.59 |
| 289 | 7.46 | 34.04 | 2.97 | 143 | 250 | 7.94 | 33.97 | 3.29 | 26.50 | 155 | 0.68 |
| 390 | 6.38 | 34.07 | 1.84 | 126 | 300 | 7.33 | 34.05 | 2.87 | 26.65 | 140 | 0.76 |
| 484 | 5.68 | 34.16 | 1.02 | 111 | 400 | 6.29 | 34.08 | 1.73 | 26.81 | 125 | 0.89 |
| 582 | 5.14 | 34.29 | 0.56 | 95 | 500 | 5.58 | 34.18 | 0.92 | 26.98 | 109 | 1.02 |
| 774 | 4.43 | 34.42 | 0.37 | 78 | 600 | 5.08 | 34.31 | 0.50 | 27.14 | 93 | 1.12 |
| 963 | 3.88 | 34.49 | 0.61 | 67 | 700 | 4.69 | 34.38 | 0.39 | 27.24 | 84 | 1.22 |
| 1162 | 3.42 | 34.56 | 0.87 | 58 | 800 | 4.33 | 34.43 | 0.38 | 27.32 | 76 | 1.31 |
| | | | | | 1000 | 3.78 | 34.51 | 0.67 | 27.44 | 65 | 1.47 |
| CREST; October 15, 1952; 0035 GCT; 34°00.5'N, 119°02.5'W; sounding, 50 fm; wind, 290°, force 5; weather, cloudy; sea, slight; wire angle, 04°. | | | | | | | | | | | 85.38 |
| 0 | 15.73 | 33.36 | 6.06 | 338 | 0 | 15.73 | 33.36 | 6.06 | 24.57 | 338 | 0.00 |
| 10 | 15.12 | 33.32 | 6.06 | 328 | 10 | 15.12 | 33.32 | 6.06 | 24.67 | 328 | 0.03 |
| 20 | 13.90 | 33.29 | 6.58 | 305 | 20 | 13.90 | 33.29 | 6.58 | 24.91 | 305 | 0.07 |
| 30 | 11.97 | 33.20 | 5.56 | 276 | 30 | 11.97 | 33.20 | 5.56 | 25.22 | 276 | 0.09 |
| 50 | 10.81 | 33.28 | 4.59 | 250 | 50 | 10.81 | 33.28 | 4.59 | 25.49 | 250 | 0.15 |
| 75 | 10.06 | 33.39 | 4.18 | 229 | 75 | 10.06 | 33.39 | 4.18 | 25.71 | 229 | 0.21 |
| CREST; October 15, 1952; 0211 GCT; 33°54'N, 119°10.5'W; sounding, 410 fm; wind, 310°, force 3; weather, overcast; sea, moderate; wire angle, 03°. | | | | | | | | | | | 85.40 |
| 0 | 15.97 | 33.48 | 6.00 | 334 | 0 | 15.97 | 33.48 | 6.00 | 24.61 | 334 | 0.00 |
| 10 | 15.68 | 33.44 | 5.27 | 331 | 10 | 15.68 | 33.44 | 5.27 | 24.64 | 331 | 0.03 |
| 20 | 14.28 | 33.42 | 5.76 | 303 | 20 | 14.28 | 33.42 | 5.76 | 24.93 | 303 | 0.07 |
| 35 | 11.94 | 33.26 | 6.04 | 271 | 30 | 12.36 | 33.28 | 6.00 | 25.21 | 277 | 0.09 |
| 50 | 11.02 | 33.30 | 4.98 | 252 | 50 | 11.02 | 33.30 | 4.98 | 25.47 | 252 | 0.15 |
| 65 | 10.40 | 33.40 | 5.04 | 234 | 75 | 10.28 | 33.52 | 4.35 | 25.77 | 223 | 0.21 |
| 80 | 10.20 | 33.55 | 3.80 | 220 | 100 | 9.78 | 33.66 | 3.49 | 25.96 | 205 | 0.26 |
| 100 | 9.78 | 33.66 | 3.49 | 205 | 150 | 9.29 | 33.99 | 2.54 | 26.30 | 173 | 0.36 |
| 123 | 9.69 | 33.79 | 2.76 | 194 | | | | | | | |
| 153 | 9.26 | 34.00 | 2.53 | 172 | | | | | | | |
| CREST; October 15, 1952; 0654 GCT; 33°40'N, 119°54'W; sounding, 75 fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 00°. | | | | | | | | | | | 85.50 |
| 0 | 16.73 | 33.44 | 5.72 | 354 | 0 | 16.73 | 33.44 | 5.72 | 24.40 | 354 | 0.00 |
| 10 | 16.25 | 33.48 | 5.65 | 340 | 10 | 16.25 | 33.48 | 5.65 | 24.54 | 340 | 0.03 |
| 20 | 13.17 | 33.39 | 5.57 | 284 | 20 | 13.17 | 33.39 | 5.57 | 25.13 | 284 | 0.07 |
| 30 | 12.21 | 33.40 | 5.19 | 265 | 30 | 12.21 | 33.40 | 5.19 | 25.33 | 265 | 0.09 |
| 50 | 10.55 | 33.51 | 4.16 | 229 | 50 | 10.55 | 33.51 | 4.16 | 25.72 | 229 | 0.14 |
| 75 | 9.58 | 33.75 | 3.15 | 195 | 75 | 9.58 | 33.75 | 3.15 | 26.07 | 195 | 0.20 |
| 100 | 9.30 | 33.89 | 2.76 | 180 | 100 | 9.30 | 33.89 | 2.76 | 26.22 | 180 | 0.24 |

SIO

CCOFI 5210

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

85.60 CREST; October 15, 1952; 1208 GCT; 33°17.5'N, 120°33'W; sounding, 600 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.62 | 33.19 | 5.77 | 348 | 0 | 15.62 | 33.19 | 5.77 | 24.46 | 348 | 0.00 |
| 9 | 15.62 | 33.24 | 5.69 | 344 | 10 | 15.62 | 33.24 | 5.68 | 24.50 | 344 | 0.03 |
| 19 | 15.61 | 33.25 | 5.58 | 343 | 20 | 15.60 | 33.25 | 5.58 | 24.51 | 343 | 0.07 |
| 33 | 15.58 | 33.21 | 5.56 | 346 | 30 | 15.59 | 33.22 | 5.56 | 24.49 | 345 | 0.10 |
| 51 | - | 33.17 | 5.99 | | 50 | 13.10 | 33.17 | 5.98 | 24.98 | 299 | 0.17 |
| 65 | 11.16 | 33.17 | 5.85 | 264 | 75 | 10.58 | 33.47 | 4.69 | 25.68 | 232 | 0.23 |
| 78 | 10.44 | 33.49 | 4.65 | 228 | 100 | 9.54 | 33.50 | 3.80 | 25.88 | 213 | 0.29 |
| 100 | 9.54 | 33.50 | 3.80 | 213 | 150 | 8.55 | 33.84 | 3.27 | 26.30 | 173 | 0.39 |
| 120 | 8.99 | 33.69 | 3.28 | 191 | 200 | 7.99 | 33.99 | 2.50 | 26.50 | 154 | 0.47 |
| 146 | 8.61 | 33.82 | 3.28 | 175 | 250 | 7.58 | 34.06 | 1.93 | 26.62 | 143 | 0.55 |
| 192 | 8.06 | 33.98 | 2.60 | 155 | 300 | 7.12 | 34.12 | 1.43 | 26.73 | 132 | 0.62 |
| 243 | 7.62 | 34.05 | 2.01 | 144 | 400 | 6.44 | 34.23 | 0.82 | 26.91 | 115 | 0.75 |
| 287 | 7.25 | 34.10 | 1.55 | 135 | 500 | 6.26 | 34.31 | 0.43 | 27.00 | 107 | 0.86 |
| 390 | 6.48 | 34.22 | 0.87 | 117 | 600 | (5.47) | (34.36) | (0.42) | (27.13) | (94) | (0.97) |
| 491 | 6.32 | 34.31 | 0.43 | 108 | | | | | | | |
| 595 | 5.50 | 34.36 | 0.42 | 94 | | | | | | | |

90.28 CREST; October 14, 1952; 1652 GCT; 33°29.5'N, 117°47'W; sounding, 100 fm; wind, 030°, force 2; weather, overcast; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.16 | 33.40 | 5.33 | 389 | 0 | 18.16 | 33.40 | 5.33 | 24.03 | 389 | 0.00 |
| 10 | 17.66 | 33.38 | 5.59 | 379 | 10 | 17.66 | 33.38 | 5.59 | 24.14 | 379 | 0.04 |
| 20 | 16.10 | 33.31 | 5.87 | 349 | 20 | 16.10 | 33.31 | 5.87 | 24.45 | 349 | 0.07 |
| 30 | 14.60 | 33.26 | 5.93 | 322 | 30 | 14.60 | 33.26 | 5.93 | 24.74 | 322 | 0.11 |
| 50 | 11.17 | 33.28 | 5.08 | 256 | 50 | 11.17 | 33.28 | 5.08 | 25.43 | 256 | 0.17 |
| 75 | 9.90 | 33.39 | 4.33 | 227 | 75 | 9.90 | 33.39 | 4.33 | 25.73 | 227 | 0.23 |
| 100 | 10.16 | 33.62 | 3.18 | 214 | 100 | 10.16 | 33.62 | 3.18 | 25.87 | 214 | 0.28 |

90.30 CREST; October 14, 1952; 1514 GCT; 33°25.5'N, 117°55'W; sounding, 300 fm; wind, 250°, force 2; weather, overcast; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.67 | 33.41 | 5.43 | 400 | 0 | 18.67 | 33.41 | 5.43 | 23.91 | 400 | 0.00 |
| 10 | 18.64 | 33.37 | 5.40 | 403 | 10 | 18.64 | 33.37 | 5.40 | 23.89 | 403 | 0.04 |
| 25 | 15.99 | 33.24 | 6.09 | 352 | 20 | 17.40 | 33.28 | 5.95 | 24.12 | 380 | 0.08 |
| 50 | 11.71 | 33.13 | 5.58 | 276 | 30 | 14.82 | 33.20 | 6.07 | 24.64 | 330 | 0.11 |
| 74 | 10.59 | 33.44 | 4.02 | 234 | 50 | 11.71 | 33.13 | 5.58 | 25.21 | 276 | 0.18 |
| 98 | 10.28 | 33.60 | 3.40 | 217 | 75 | 10.57 | 33.45 | 3.99 | 25.67 | 233 | 0.24 |
| 151 | 9.92 | 33.96 | 2.46 | 185 | 100 | 10.25 | 33.61 | 3.32 | 25.85 | 216 | 0.30 |
| 198 | 9.66 | 34.14 | 1.97 | 168 | 150 | 9.93 | 33.96 | 2.48 | 26.17 | 185 | 0.40 |
| 243 | 9.57 | 34.29 | 1.43 | 155 | 200 | 9.64 | 34.15 | 1.92 | 26.37 | 167 | 0.49 |
| 290 | 8.26 | 34.23 | 1.35 | 140 | 250 | 9.52 | 34.29 | 1.40 | 26.50 | 154 | 0.57 |
| 342 | 7.63 | 34.29 | 1.01 | 126 | 300 | 8.10 | 34.24 | 1.29 | 26.68 | 137 | 0.65 |
| 390 | 7.21 | 34.33 | 0.73 | 118 | 400 | (7.13) | (34.34) | (0.68) | (26.90) | (116) | (0.78) |

90.45 CREST; October 13, 1952; 2113 GCT; 32°54.5'N, 118°56'W; sounding, 800 fm; wind, 300°, force 4; weather, overcast; sea, moderate; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.91 | 33.42 | 5.60 | 359 | 0 | 16.91 | 33.42 | 5.60 | 24.34 | 359 | 0.00 |
| 10 | 16.86 | 33.41 | 5.67 | 359 | 10 | 16.86 | 33.41 | 5.67 | 24.35 | 359 | 0.04 |
| 20 | 15.99 | 33.44 | 5.92 | 337 | 20 | 15.99 | 33.44 | 5.92 | 24.57 | 337 | 0.07 |
| 35 | 12.50 | 33.44 | 5.25 | 268 | 30 | 13.70 | 33.44 | 5.59 | 25.06 | 291 | 0.10 |
| 55 | 10.85 | 33.48 | 4.24 | 236 | 50 | 11.30 | 33.46 | 4.49 | 25.54 | 245 | 0.16 |
| 69 | 9.79 | 33.55 | 3.75 | 213 | 75 | 9.61 | 33.60 | 3.58 | 25.95 | 207 | 0.21 |
| 85 | 9.32 | 33.68 | 3.37 | 196 | 100 | 9.03 | 33.81 | 3.11 | 26.20 | 182 | 0.26 |
| 108 | 8.96 | 33.86 | 3.06 | 178 | 150 | 8.51 | 34.04 | 2.73 | 26.46 | 158 | 0.35 |
| 131 | 8.78 | 33.96 | 2.81 | 167 | 200 | 8.40 | 34.23 | 1.63 | 26.63 | 142 | 0.42 |
| 159 | 8.38 | 34.07 | 2.69 | 153 | 250 | 8.13 | 34.29 | 1.15 | 26.72 | 133 | 0.50 |
| 209 | 8.40 | 34.25 | 1.45 | 140 | 300 | 7.61 | 34.29 | 0.96 | 26.79 | 126 | 0.56 |
| 258 | 8.05 | 34.29 | 1.12 | 132 | 400 | 6.94 | 34.31 | 0.54 | 26.90 | 116 | 0.69 |
| 309 | 7.52 | 34.29 | 0.93 | 125 | 500 | 6.32 | 34.33 | 0.37 | 27.00 | 106 | 0.81 |
| 414 | 6.87 | 34.31 | 0.50 | 115 | 600 | 5.80 | | 0.43 | | | |
| 520 | 6.20 | 34.33 | 0.36 | 105 | | | | | | | |
| 627 | 5.69 | 34.22u | 0.48 | | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | SIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ | CCOFI 5210 |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m | |
| CREST; October 13, 1952; 1630 GCT; 32°38.5'N, 119°29'W; sounding, 700 fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 36°. | | | | | | | | | | | | 90.53 |
| 0 | 16.23 | 33.37 | 5.64 | 348 | 0 | 16.23 | 33.37 | 5.64 | 24.46 | 348 | 0.00 | |
| 8 | 16.24 | 33.39 | 5.74 | 347 | 10 | 16.24 | 33.39 | 5.73 | 24.48 | 347 | 0.03 | |
| 20 | 16.21 | 33.38 | 5.69 | 347 | 20 | 16.21 | 33.38 | 5.69 | 24.48 | 347 | 0.07 | |
| 40 | 13.04 | 33.17 | 6.05 | 298 | 30 | 14.80 | 33.29 | 5.79 | 24.72 | 323 | 0.10 | |
| 60 | 11.94 | 33.11 | 5.60 | 282 | 50 | 12.59 | 33.10 | 5.88 | 25.02 | 294 | 0.17 | |
| 80 | 10.35 | 33.28 | 4.79 | 242 | 75 | 10.65 | 33.22 | 5.00 | 25.47 | 252 | 0.23 | |
| 124 | 9.01 | 33.69 | 3.35 | 191 | 100 | 9.67 | 33.49 | 4.05 | 25.85 | 216 | 0.29 | |
| 163 | 8.47 | 33.94 | 2.70 | 164 | 150 | 8.68 | 33.88 | 2.82 | 26.31 | 172 | 0.39 | |
| 202 | 7.96 | 33.99 | 2.60 | 153 | 200 | 7.98 | 33.99 | 2.62 | 26.51 | 154 | 0.47 | |
| 241 | 7.82 | 34.09 | 1.94 | 144 | 250 | 7.79 | 34.11 | 1.82 | 26.63 | 142 | 0.55 | |
| 326 | 7.44 | 34.20 | 1.18 | 131 | 300 | 7.58 | 34.17 | 1.32 | 26.70 | 135 | 0.62 | |
| 407 | 6.92 | 34.29 | 0.89 | 117 | 400 | 6.97 | 34.28 | 0.90 | 26.88 | 118 | 0.75 | |
| 493 | 6.21 | 34.34 | 0.41 | 104 | 500 | 6.18 | (34.34) | 0.40 | (27.03) | (104) | (0.87) | |
| 576 | 5.72 | 34.20u | 0.38 | | 600 | 5.60 | | 0.37 | | | | |
| 667 | 5.26 | 34.22u | 0.31 | | 700 | 5.08 | | 0.34 | | | | |
| 850 | 4.42 | 34.27u | 0.45 | | 800 | 4.61 | | 0.41 | | | | |
| CREST; October 13, 1952; 1222 GCT; 32°28'N, 119°51'W; sounding, 750 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 36°. | | | | | | | | | | | | 90.60 |
| 0 | 17.05 | 33.19 | 6.00 | 379 | 0 | 17.05 | 33.19 | 6.00 | 24.14 | 379 | 0.00 | |
| 7 | 16.96 | 33.19 | 5.39 | 377 | 10 | 16.87 | 33.19 | 5.41 | 24.18 | 375 | 0.04 | |
| 15 | 16.46 | 33.21 | 5.83 | 364 | 20 | 16.34 | 33.24 | 5.75 | 24.34 | 360 | 0.07 | |
| 28 | 16.21 | 33.26 | 5.30 | 355 | 30 | 16.18 | 33.26 | 5.05 | 24.39 | 355 | 0.11 | |
| 43 | 15.72 | 33.22 | 4.60 | 348 | 50 | 14.70 | 33.12 | 6.00 | 24.61 | 334 | 0.18 | |
| 55 | 13.46 | 33.08 | 6.18 | 312 | 75 | 11.40 | 33.16 | 5.20 | 25.29 | 269 | 0.26 | |
| 66 | 12.26 | 33.12 | 5.74 | 287 | 100 | 9.96 | 33.35 | 4.60 | 25.69 | 231 | 0.32 | |
| 84 | 10.76 | 33.19 | 4.92 | 256 | 150 | 8.75 | 33.79 | 3.17 | 26.23 | 180 | 0.42 | |
| 103 | 9.86 | 33.37 | 4.53 | 228 | 200 | 8.07 | 33.98 | 3.23 | 26.48 | 156 | 0.51 | |
| 124 | 9.38 | 33.49 | 4.13 | 211 | 250 | 7.62 | 34.06 | 2.15 | 26.61 | 143 | 0.58 | |
| 161 | 8.54 | 33.86 | 2.97 | 171 | 300 | 7.28 | 34.18 | 1.40 | 26.76 | 130 | 0.65 | |
| 198 | 8.10 | 33.98 | 3.25 | 156 | 400 | 6.29 | 34.17 | 0.83 | 26.88 | 118 | 0.78 | |
| 230 | 7.74 | 34.02 | 2.60 | 148 | 500 | 5.79 | 34.24 | 0.55 | 27.00 | 107 | 0.90 | |
| 314 | 7.16 | 34.20 | 1.27 | 127 | | | | | | | | |
| 408 | 6.23 | 34.17 | 0.79 | 117 | | | | | | | | |
| 509 | 5.74 | 34.25 | 0.53 | 105 | | | | | | | | |
| CREST; October 13, 1952; 0613 GCT; 32°04'N, 120°40'W; sounding, 2000 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 30°. | | | | | | | | | | | | 90.70 |
| 0 | 17.41 | 33.22 | 5.69 | 385 | 0 | 17.41 | 33.22 | 5.69 | 24.07 | 385 | 0.00 | |
| 8 | 17.40 | 33.22 | 5.64 | 385 | 10 | 17.40 | 33.22 | 5.63 | 24.08 | 385 | 0.04 | |
| 26 | 17.41 | 33.19 | 5.54 | 387 | 20 | 17.40 | 33.20 | 5.56 | 24.06 | 386 | 0.08 | |
| 52 | 14.00 | 33.06 | 6.34 | 324 | 30 | 17.38 | 33.16 | 5.60 | 24.03 | 389 | 0.12 | |
| 78 | 11.57 | 33.15 | 5.48 | 272 | 50 | 14.28 | 33.06 | 6.33 | 24.65 | 330 | 0.19 | |
| 104 | 10.04 | 33.31 | 4.69 | 235 | 75 | 11.81 | 33.13 | 5.52 | 25.19 | 278 | 0.26 | |
| 155 | 8.92 | 33.78 | 3.31 | 183 | 100 | 10.22 | 33.29 | 4.80 | 25.60 | 239 | 0.33 | |
| 204 | 8.36 | 34.04 | 2.66 | 155 | 150 | 9.00 | 33.74 | 3.43 | 26.15 | 187 | 0.44 | |
| 252 | 8.00 | 34.16 | 1.81 | 141 | 200 | 8.39 | 34.02 | 2.72 | 26.47 | 157 | 0.52 | |
| 300 | 7.65 | 34.25 | 1.42 | 130 | 250 | 8.02 | 34.16 | 1.85 | 26.63 | 142 | 0.60 | |
| 391 | 6.85 | 34.29 | 0.93 | 116 | 300 | 7.65 | 34.25 | 1.42 | 26.76 | 130 | 0.67 | |
| 485 | 6.09 | 34.34 | 0.62 | 103 | 400 | 6.77 | 34.29 | 0.88 | 26.91 | 115 | 0.80 | |
| 576 | 5.66 | 34.38 | 0.40 | 95 | 500 | 6.02 | 34.35 | 0.60 | 27.06 | 101 | 0.91 | |
| 773 | 4.56 | 34.43 | 0.53 | 79 | 600 | 5.51 | 34.39 | 0.41 | 27.15 | 92 | 1.02 | |
| 975 | 4.02 | 34.54 | 0.69 | 65 | 700 | 4.87 | 34.41 | 0.49 | 27.24 | 84 | 1.11 | |
| 1181 | 3.52 | 34.56 | 1.03 | 59 | 800 | 4.48 | 34.44 | 0.56 | 27.31 | 77 | 1.20 | |
| | | | | | 1000 | 3.97 | 34.54 | 0.72 | 27.45 | 64 | 1.36 | |

SIO

CCOFI
5210

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

93.27 CREST; October 12, 1952; 0625 GCT; 32°55'N, 117°21'W; sounding, 200 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.30 | 33.40 | 5.64 | 392 | 0 | 18.30 | 33.40 | 5.64 | 24.00 | 392 | 0.00 |
| 9 | 18.12 | 33.40 | 5.82 | 388 | 10 | 18.10 | 33.40 | 5.84 | 24.04 | 388 | 0.04 |
| 24 | 14.42 | 33.21 | 6.70 | 322 | 20 | 16.48 | 33.30 | 6.64 | 24.35 | 358 | 0.08 |
| 47 | 11.53 | 33.15 | 6.19 | 272 | 30 | 13.55 | 33.17 | 6.67 | 24.89 | 307 | 0.11 |
| 69 | 10.27 | 33.35 | 4.50 | 236 | 50 | 11.14 | 33.15 | 5.95 | 25.33 | 265 | 0.17 |
| 92 | 10.01 | 33.60 | 3.93 | 213 | 75 | 10.18 | 33.44 | 4.28 | 25.73 | 228 | 0.23 |
| 141 | 9.01 | 33.84 | 3.55 | 180 | 100 | 9.86 | 33.67 | 3.85 | 25.96 | 206 | 0.28 |
| 186 | 8.49 | 33.93 | 3.23 | 165 | 150 | 8.91 | 33.86 | 3.48 | 26.26 | 177 | 0.38 |
| 232 | 8.05 | 34.07 | 2.31 | 149 | 200 | 8.32 | 33.97 | 3.01 | 26.44 | 160 | 0.47 |
| 280 | 8.47 | 34.31 | 1.58 | 137 | 250 | 8.15 | 34.15 | 1.98 | 26.61 | 144 | 0.54 |

93.30 CREST; October 12, 1952; 0911 GCT; 32°49.5'N, 117°32.5'W; sounding, 510 fm; wind, 360°, force 2; weather, cloudy; sea, moderate; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.00 | 33.35 | 5.41 | 413 | 0 | 19.00 | 33.35 | 5.41 | 23.78 | 413 | 0.00 |
| 8 | 19.02 | 33.35 | 5.15 | 413 | 10 | 19.01 | 33.35 | 5.15 | 23.78 | 413 | 0.04 |
| 17 | 18.95 | 33.34 | 5.31 | 412 | 20 | 18.90 | 33.33 | 5.80 | 23.79 | 412 | 0.08 |
| 31 | 14.58 | 33.22 | 5.91 | 324 | 30 | 14.85 | 33.22 | 5.90 | 24.65 | 330 | 0.12 |
| 50 | 12.26 | 33.22 | 5.79 | 280 | 50 | 12.26 | 33.22 | 5.79 | 25.18 | 280 | 0.18 |
| 64 | 11.90 | 33.31 | 5.28 | 267 | 75 | 11.08 | 33.43 | 4.45 | 25.56 | 243 | 0.25 |
| 78 | 10.89 | 33.44 | 4.32 | 239 | 100 | 9.96 | 33.55 | 3.80 | 25.85 | 216 | 0.30 |
| 102 | 9.85 | 33.56 | 3.77 | 214 | 150 | 9.83 | 34.04 | 2.02 | 26.25 | 178 | 0.40 |
| 125 | 9.17 | 33.73 | 3.57 | 190 | 200 | 8.92 | 34.12 | 2.37 | 26.46 | 158 | 0.49 |
| 153 | 9.86 | 34.05 | 1.99 | 177 | 250 | 8.61 | 34.21 | 1.80 | 26.58 | 146 | 0.57 |
| 205 | 8.88 | 34.13 | 2.39 | 156 | 300 | 8.25 | 34.30 | 1.10 | 26.71 | 134 | 0.64 |
| 305 | 8.20 | 34.31 | 1.06 | 133 | 400 | 7.12 | 34.33 | 0.75 | 26.90 | 117 | 0.77 |
| 413 | 7.00 | 34.33 | 0.76 | 115 | 500 | 6.35 | 34.35 | 0.59 | 27.02 | 105 | 0.89 |
| 517 | 6.26 | 34.36 | 0.56 | 103 | | | | | | | |

93.40 CREST; October 12, 1952; 1427 GCT; 32°30'N, 118°12'W; sounding, 800 fm; wind, 220°, force 4; weather, cloudy; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.61 | 33.39 | 5.51 | 400 | 0 | 18.61 | 33.39 | 5.51 | 23.91 | 400 | 0.00 |
| 10 | 18.60 | 33.40 | 5.42 | 399 | 10 | 18.60 | 33.40 | 5.42 | 23.92 | 399 | 0.04 |
| 20 | 17.18 | 33.40 | 5.91 | 367 | 20 | 17.18 | 33.40 | 5.91 | 24.27 | 367 | 0.08 |
| 35 | 14.33 | 33.21 | 6.03 | 320 | 30 | 15.12 | 33.28 | 6.02 | 24.64 | 331 | 0.11 |
| 55 | 11.76 | 33.12 | 5.37 | 278 | 50 | 12.08 | 33.13 | 5.70 | 25.14 | 283 | 0.17 |
| 70 | 10.93 | 33.21 | 4.92 | 257 | 75 | 10.73 | 33.26 | 4.85 | 25.49 | 250 | 0.24 |
| 84 | 10.32 | 33.34 | 4.72 | 237 | 100 | 9.72 | 33.49 | 4.20 | 25.84 | 217 | 0.30 |
| 108 | 9.60 | 33.61 | 3.61 | 206 | 150 | 9.21 | 33.98 | 2.76 | 26.31 | 172 | 0.40 |
| 132 | 9.46 | 33.90 | 2.79 | 182 | 200 | 8.55 | 34.10 | 2.58 | 26.50 | 154 | 0.48 |
| 161 | 9.06 | 34.02 | 2.74 | 167 | 250 | 7.87 | 34.15 | 2.00 | 26.65 | 140 | 0.56 |
| 212 | 8.38 | 34.11 | 2.48 | 150 | 300 | 7.37 | 34.19 | 1.45 | 26.75 | 130 | 0.63 |
| 267 | 7.66 | 34.16 | 1.79 | 137 | 400 | 6.82 | 34.31 | 0.75 | 26.92 | 114 | 0.76 |
| 313 | 7.28 | 34.20 | 1.33 | 128 | 500 | 6.22 | 34.37 | 0.47 | 27.05 | 102 | 0.87 |
| 419 | 6.70 | 34.33 | 0.67 | 111 | 600 | 5.68 | 34.38 | 0.38 | 27.12 | 95 | 0.98 |
| 513 | 6.13 | 34.37 | 0.44 | 101 | | | | | | | |
| 630 | 5.56 | 34.38 | 0.37 | 93 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; October 12, 1952; 1929 GCT; 32°11'N, 118°53'W; sounding, 750 fm; wind, 300°, force 4; weather, overcast; sea, moderate; wire angle, 20°. | | | | | | | | | | | 93.50 |
| 0 | 17.50 | 33.48 | 5.90 | 368 | 0 | 17.50 | 33.48 | 5.90 | 24.25 | 368 | 0.00 |
| 9 | 17.48 | 33.46 | 5.47 | 369 | 10 | 17.48 | 33.46 | 5.45 | 24.24 | 369 | 0.04 |
| 23 | 17.47 | 33.46 | 5.25 | 369 | 20 | 17.47 | 33.46 | 5.28 | 24.24 | 369 | 0.07 |
| 47 | 13.77 | 33.13 | 6.10 | 315 | 30 | 17.40 | 33.44 | 5.40 | 24.24 | 369 | 0.11 |
| 70 | 11.54 | 33.19 | 5.42 | 269 | 50 | 13.38 | 33.13 | 6.08 | 24.89 | 307 | 0.18 |
| 94 | 10.09 | 33.40 | 3.56 | 229 | 75 | 11.15 | 33.25 | 4.93 | 25.41 | 258 | 0.25 |
| 145 | 8.86 | 33.80 | 3.18 | 180 | 100 | 9.96 | 33.46 | 3.43 | 25.78 | 223 | 0.31 |
| 189 | 8.48 | 34.02 | 2.80 | 159 | 150 | 8.81 | 33.84 | 3.14 | 26.26 | 177 | 0.41 |
| 234 | 8.26 | 34.11 | 2.14 | 149 | 200 | 8.42 | 34.05 | 2.65 | 26.49 | 155 | 0.50 |
| 276 | 8.01 | 34.23 | 1.32 | 136 | 250 | 8.18 | 34.15 | 1.90 | 26.60 | 145 | 0.57 |
| 368 | 7.26 | 34.29 | 0.73 | 121 | 300 | 7.80 | 34.26 | 1.10 | 26.74 | 131 | 0.64 |
| 454 | 6.72 | 34.34 | 0.45 | 111 | 400 | 7.07 | 34.31 | 0.64 | 26.89 | 117 | 0.77 |
| 546 | 6.08 | 34.36 | 0.43 | 101 | 500 | 6.42 | 34.35 | 0.44 | 27.01 | 106 | 0.89 |
| 723 | 5.00 | 34.43 | 0.38 | 83 | 600 | 5.73 | 34.38 | 0.42 | 27.12 | 95 | 1.00 |
| 894 | 4.22 | 34.49 | 0.53 | 71 | 700 | 5.12 | 34.42 | 0.39 | 27.22 | 85 | 1.10 |
| 1070 | 3.74 | 34.51 | 0.73 | 64 | 800 | 4.61 | 34.46 | 0.42 | 27.31 | 77 | 1.19 |
| | | | | | 1000 | 3.90 | 34.51 | 0.64 | 27.43 | 66 | 1.35 |
| CREST; October 10, 1952; 1328 GCT; 32°11'N, 117°18.5'W; sounding, 720 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | | 97.32 |
| 0 | 19.34 | 33.40 | | 417 | 0 | 19.34 | 33.40 | | 23.73 | 417 | 0.00 |
| 10 | 19.35 | 33.43 | | 415 | 10 | 19.35 | 33.43 | | 23.75 | 415 | 0.04 |
| 20 | 17.64 | 33.35 | | 381 | 20 | 17.64 | 33.35 | | 24.12 | 381 | 0.08 |
| 35 | 13.04 | 33.19 | | 296 | 30 | 13.95 | 33.20 | | 24.83 | 313 | 0.12 |
| 54 | 10.96 | 33.37 | | 246 | 50 | 11.20 | 33.33 | | 25.46 | 253 | 0.17 |
| 68 | 10.54 | 33.48 | | 231 | 75 | 10.34 | 33.53 | | 25.77 | 224 | 0.23 |
| 83 | 10.19 | 33.59 | | 217 | 100 | 10.01 | 33.73 | | 25.98 | 203 | 0.29 |
| 106 | 9.93 | 33.78 | | 199 | 150 | 9.42 | 34.02 | | 26.30 | 173 | 0.38 |
| 128 | 9.69 | 33.93 | | 184 | 200 | 9.37 | 34.29 | | 26.52 | 152 | 0.46 |
| 157 | 9.38 | 34.04 | | 171 | 250 | 8.87 | 34.31 | | 26.62 | 143 | 0.54 |
| 207 | 9.37 | 34.30 | | 151 | 300 | 8.51 | 34.34 | | 26.70 | 135 | 0.61 |
| 263 | 8.72 | 34.31 | | 141 | 400 | 7.07 | 34.33 | | 26.90 | 116 | 0.74 |
| 309 | 8.42 | 34.34 | | 134 | 500 | 6.42 | 34.35 | | 27.01 | 106 | 0.86 |
| 416 | 6.92 | 34.33 | | 114 | 600 | 5.73 | 34.39 | | 27.13 | 95 | 0.97 |
| 522 | 6.28 | 34.36 | | 104 | | | | | | | |
| 626 | 5.56 | 34.40 | | 92 | | | | | | | |
| CREST; October 10, 1952; 0743, 0800 GCT; 31°55'N, 117°50'W; sounding, 850 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 22°, 25°. | | | | | | | | | | | 97.40 |
| 0 | 18.90 | 33.44 | | 404 | 0 | 18.90 | 33.44 | | 23.88 | 404 | 0.00 |
| 9 | 18.89 | 33.41 | | 406 | 10 | 18.89 | 33.41 | | 23.86 | 406 | 0.04 |
| 18 | 18.92 | 33.44 | | 404 | 20 | 18.91 | 33.44 | | 23.87 | 404 | 0.08 |
| | | | | | 30 | 14.20 | 33.33 | | 24.88 | 308 | 0.12 |
| 32 | 13.61 | 33.33 | | 297 | 50 | 11.28 | 33.37 | | 25.48 | 251 | 0.17 |
| 50 | 11.28 | 33.37 | | 251 | 75 | 10.03 | 33.54 | | 25.83 | 218 | 0.23 |
| 64 | 10.46 | 33.46 | | 231 | 100 | 9.68 | 33.79 | | 26.08 | 194 | 0.28 |
| 77 | 10.00 | 33.55 | | 217 | 150 | 9.72 | 34.11 | | 26.32 | 171 | 0.38 |
| 99 | 9.68 | 33.78 | | 195 | 200 | 9.43 | 34.24 | | 26.47 | 157 | 0.46 |
| 120 | 9.81 | 33.94 | | 185 | 250 | 8.43 | 34.20 | | 26.60 | 144 | 0.54 |
| 143 | 9.73 | 34.07 | | 174 | 300 | 8.26 | 34.29 | | 26.70 | 135 | 0.61 |
| 187 | 9.58 | 34.25 | | 158 | 400 | 7.15 | 34.27 | | 26.84 | 121 | 0.74 |
| 234 | 8.40 | 34.18 | | 146 | 500 | 6.58 | 34.35 | | 26.99 | 108 | 0.87 |
| 274 | 8.48 | 34.29 | | 138 | | | | | | | |
| 370 | 7.32 | 34.25 | | 125 | | | | | | | |
| 466 | 6.78 | 34.34 | | 111 | | | | | | | |
| 567 | 6.17 | 34.37 | | 101 | | | | | | | |

SIO

CCOFI 5210

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

97.50 CREST; October 10, 1952; 0145 GCT; 31°35'N, 118°30'W; sounding, 600 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.54 | 33.40 | 398 | 0 | 18.54 | 33.40 | | 23.94 | 398 | 0.00 |
| 10 | 18.52 | 33.40 | 398 | 10 | 18.52 | 33.40 | | 23.94 | 398 | 0.04 |
| 20 | 18.53 | 33.37 | 400 | 20 | 18.53 | 33.37 | | 23.92 | 400 | 0.08 |
| 34 | 15.14 | 33.28 | 331 | 30 | 17.35 | 33.30 | | 24.15 | 378 | 0.12 |
| 53 | 11.22 | 33.26 | 258 | 50 | 11.63 | 33.26 | | 25.33 | 265 | 0.18 |
| 65 | 10.50 | 33.37 | 238 | 75 | 10.24 | 33.60 | | 25.84 | 217 | 0.24 |
| 81 | 10.12 | 33.66 | 210 | 100 | 10.06 | 33.84 | | 26.06 | 196 | 0.30 |
| 103 | 10.06 | 33.87 | 194 | 150 | 10.08 | 34.10 | | 26.26 | 177 | 0.39 |
| 125 | 10.01 | 34.04 | 181 | 200 | 10.04 | 34.23 | | 26.36 | 167 | 0.48 |
| 152 | 10.08 | 34.10 | 177 | 250 | 9.73 | 34.32 | | 26.49 | 155 | 0.56 |
| 202 | 10.04 | 34.23 | 167 | 300 | 9.27 | 34.37 | | 26.60 | 144 | 0.64 |
| 256 | 9.68 | 34.33 | 154 | 400 | 8.19 | 34.35 | | 26.76 | 130 | 0.78 |
| 302 | 9.24 | 34.37 | 144 | 500 | 7.02 | 34.34 | | 26.92 | 115 | 0.91 |
| 403 | 8.17 | 34.35 | 130 | 600 | 6.32 | 34.39 | | 27.05 | 102 | 1.03 |
| 509 | 6.96 | 34.34 | 114 | | | | | | | |
| 616 | 6.24 | 34.40 | 100 | | | | | | | |

100.29 CREST; October 8, 1952; 0437 GCT; 31°42'N, 116°45.5'W; sounding, 200 fm; wind, 340°, force 5; weather, clear; sea, moderate; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.24 | 33.35 | 6.73 | 349 | 0 | 16.24 | 33.35 | 6.73 | 24.45 | 349 | 0.00 |
| 8 | 14.40 | 33.30 | 6.17 | 315 | 10 | 14.28 | 33.29 | 6.11 | 24.83 | 313 | 0.03 |
| 22 | 12.65 | 33.26 | 5.75 | 284 | 20 | 12.89 | 33.26 | 5.86 | 25.09 | 288 | 0.06 |
| 43 | 11.16 | 33.44 | 4.62 | 244 | 30 | 11.90 | 33.30 | 5.40 | 25.31 | 267 | 0.09 |
| 66 | 10.64 | 33.55 | 3.77 | 227 | 50 | 10.96 | 33.49 | 4.21 | 25.63 | 237 | 0.14 |
| 86 | 10.50 | 33.58 | 3.51 | 223 | 75 | 10.57 | 33.56 | 3.62 | 25.75 | 225 | 0.20 |
| 134 | 9.88 | 33.89 | 2.71 | 190 | 100 | 10.39 | 33.66 | 3.30 | 25.86 | 215 | 0.26 |
| 175 | 9.76 | 34.16 | 1.81 | 168 | 150 | 9.82 | 34.02 | 2.33 | 26.24 | 179 | 0.35 |
| 218 | 9.64 | 34.26 | 1.42 | 158 | 200 | 9.71 | 34.22 | 1.55 | 26.41 | 162 | 0.44 |
| 262 | 9.16 | 34.34 | 1.13 | 145 | 250 | 9.30 | 34.32 | 1.22 | 26.56 | 149 | 0.52 |

100.30 CREST; October 8, 1952; 0608 GCT; 31°40'N, 116°46.5'W; sounding, 50 fm; wind, 330°, force 5; weather, clear; sea, moderate; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.66 | 33.38 | 5.64 | 379 | 0 | 17.66 | 33.38 | 5.64 | 24.14 | 379 | 0.00 |
| 10 | 17.64 | 33.37 | 5.69 | 379 | 10 | 17.64 | 33.37 | 5.69 | 24.13 | 379 | 0.04 |
| 20 | 13.55 | 33.31 | 6.10 | 297 | 20 | 13.55 | 33.31 | 6.10 | 24.99 | 297 | 0.07 |
| 30 | 13.21 | 33.28 | 5.91 | 293 | 30 | 13.21 | 33.28 | 5.91 | 25.04 | 293 | 0.10 |
| 49 | 10.96 | 33.45 | 4.03 | 240 | 50 | 10.92 | 33.46 | 4.02 | 25.61 | 238 | 0.15 |
| 73 | 10.47 | 33.60 | 3.48 | 221 | 75 | (10.45) | (33.61) | (3.46) | (25.81) | (220) | (0.21) |

100.40 CREST; October 8, 1952; 1135 GCT; 31°19'N, 117°26'W; sounding, 1100 fm; wind, 330°, force 5; weather, clear; sea, moderate; wire angle, 35°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.17 | 33.46 | 5.13 | 409 | 0 | 19.17 | 33.46 | 5.13 | 23.82 | 409 | 0.00 |
| 8 | 19.16 | 33.42 | 5.15 | 411 | 10 | 19.16 | 33.42 | 5.16 | 23.80 | 411 | 0.04 |
| 21 | 19.15 | 33.42 | 5.18 | 411 | 20 | 19.15 | 33.42 | 5.18 | 23.80 | 411 | 0.08 |
| 45 | 13.90 | 33.25 | 5.18 | 308 | 30 | 17.25 | 33.38 | 5.18 | 24.23 | 370 | 0.12 |
| 65 | 12.14 | 33.21 | 5.55 | 278 | 50 | 13.56 | 33.23 | 5.21 | 24.93 | 303 | 0.19 |
| 86 | 10.61 | 33.53 | 3.75 | 228 | 75 | 10.83 | 33.34 | 5.25 | 25.53 | 246 | 0.26 |
| 124 | 10.42 | 33.86 | 1.73 | 201 | 100 | 10.50 | 33.69 | 2.40 | 25.86 | 214 | 0.32 |
| 160 | 10.30 | 34.11 | 1.52 | 180 | 150 | 10.34 | 34.04 | 1.54 | 26.16 | 186 | 0.42 |
| 200 | 9.91 | 34.14 | 1.72 | 172 | 200 | 9.91 | 34.14 | 1.72 | 26.32 | 172 | 0.51 |
| 233 | 9.48 | 34.23 | 1.69 | 158 | 250 | 9.38 | 34.26 | 1.62 | 26.50 | 154 | 0.59 |
| 311 | 8.88 | 34.34 | 1.11 | 141 | 300 | 9.01 | 34.33 | 1.19 | 26.61 | 143 | 0.67 |
| 386 | 7.44 | 34.29 | 0.86 | 124 | 400 | 7.33 | 34.29 | 0.81 | 26.83 | 122 | 0.81 |
| 462 | 6.82 | 34.31 | 0.58 | 114 | 500 | 6.47 | 34.34 | 0.44 | 26.99 | 107 | 0.93 |
| 613 | 5.64 | 34.42 | 0.27 | 91 | 600 | 5.74 | 34.41 | 0.28 | 27.14 | 93 | 1.04 |
| 784 | 4.86 | 34.45 | 0.34 | 80 | 700 | 5.22 | 34.43 | 0.28 | 27.22 | 86 | 1.14 |
| 972 | 4.16 | 34.51 | 0.51 | 69 | 800 | 4.80 | 34.46 | 0.36 | 27.29 | 79 | 1.23 |
| | | | | | 1000 | (4.06) | (34.52) | (0.52) | (27.42) | (67) | (1.39) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; October 8, 1952; 1805 GCT; 31°01'N, 118°07'W; sounding, 900 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 10°. | | | | | | | | | | | 100.50 |
| 0 | 18.44 | 33.35 | | 399 | 0 | 18.44 | 33.35 | | 23.92 | 399 | 0.00 |
| 10 | 18.45 | 33.37 | | 398 | 10 | 18.45 | 33.37 | | 23.94 | 398 | 0.04 |
| 20 | 17.74 | 33.37 | | 382 | 20 | 17.74 | 33.37 | | 24.11 | 382 | 0.08 |
| 34 | 15.54 | 33.26 | | 341 | 30 | 16.26 | 33.27 | | 24.38 | 356 | 0.12 |
| 54 | 11.28 | 33.44 | | 246 | 50 | 12.05 | 33.40 | | 25.36 | 263 | 0.18 |
| 68 | 10.24 | 33.51 | | 223 | | | | | | | |
| CREST; October 8, 1952; 2346 GCT; 30°41'N, 118°47.5'W; sounding, 1250 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 38°. | | | | | | | | | | | 100.60 |
| 1 | 19.33 | 33.49 | | 411 | 0 | (19.33) | (33.49) | | (23.81) | (411) | (0.00) |
| 12 | 19.31 | 33.47 | | 411 | 10 | 19.32 | 33.47 | | 23.79 | 412 | 0.04 |
| 37 | 15.43 | 33.33 | | 334 | 20 | 19.29 | 33.47 | | 23.80 | 411 | 0.08 |
| 55 | 13.52 | 33.35 | | 294 | 30 | 19.20 | 33.46 | | 23.82 | 410 | 0.12 |
| 77 | 11.32 | 33.42 | | 248 | 50 | 14.00 | 33.34 | | 24.93 | 304 | 0.19 |
| 112 | 9.79 | 33.75 | | 199 | 75 | 11.43 | 33.41 | | 25.48 | 251 | 0.26 |
| 142 | 9.48 | 33.93 | | 180 | 100 | 10.05 | 33.62 | | 25.89 | 212 | 0.32 |
| 173 | 9.03 | 34.02 | | 167 | 150 | 9.37 | 33.95 | | 26.26 | 177 | 0.42 |
| 204 | 8.83 | 34.18 | | 152 | 200 | 8.87 | 34.17 | | 26.51 | 153 | 0.51 |
| 269 | 7.91 | 34.19 | | 138 | 250 | 8.07 | 34.19 | | 26.65 | 140 | 0.58 |
| 329 | 7.69 | 34.34 | | 124 | 300 | 7.81 | 34.28 | | 26.76 | 130 | 0.65 |
| 390 | 7.07 | 34.31 | | 117 | 400 | 7.00 | 34.31 | | 26.90 | 116 | 0.78 |
| 510 | 6.24 | 34.32 | | 106 | 500 | 6.31 | 34.32 | | 27.00 | 107 | 0.90 |
| 657 | 5.37 | 34.40 | | 90 | 600 | 5.69 | 34.36 | | 27.11 | 96 | 1.01 |
| 823 | 4.59 | 34.51 | | 73 | 700 | 5.14 | 34.43 | | 27.23 | 85 | 1.11 |
| | | | | | 800 | 4.69 | 34.49 | | 27.33 | 76 | 1.19 |
| CREST; October 9, 1952; 0546 GCT; 30°20.5'N, 119°27'W; sounding, 2000 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 23°. | | | | | | | | | | | 100.70 |
| 0 | 19.39 | 33.37 | | 421 | 0 | 19.39 | 33.37 | | 23.70 | 421 | 0.00 |
| 9 | 19.40 | 33.37 | | 421 | 10 | 19.40 | 33.37 | | 23.70 | 421 | 0.04 |
| 18 | 19.39 | 33.39 | | 419 | 20 | 19.38 | 33.39 | | 23.72 | 419 | 0.08 |
| 32 | 18.41 | 33.31 | | 402 | 30 | 19.00 | 33.32 | | 23.76 | 415 | 0.13 |
| 50 | 17.26 | 33.28 | | 377 | 50 | 17.26 | 33.28 | | 24.15 | 377 | 0.21 |
| 63 | 16.48 | 33.41 | | 350 | 75 | 15.08 | 33.38 | | 24.73 | 323 | 0.29 |
| 76 | 15.06 | 33.38 | | 322 | 100 | 12.61 | 33.22 | | 25.11 | 286 | 0.37 |
| 98 | 12.78 | 33.22 | | 289 | 150 | 9.60 | 33.44 | | 25.82 | 218 | 0.50 |
| 120 | 11.14 | 33.21 | | 261 | 200 | 8.81 | 33.87 | | 26.28 | 175 | 0.60 |
| 144 | 9.67 | 33.37 | | 225 | 250 | 7.98 | 34.05 | | 26.55 | 149 | 0.68 |
| 192 | 8.96 | 33.82 | | 181 | 300 | 7.46 | 34.11 | | 26.67 | 138 | 0.75 |
| 243 | 8.06 | 34.04 | | 151 | 400 | 6.62 | 34.23 | | 26.89 | 118 | 0.89 |
| 287 | 7.58 | 34.09 | | 141 | 500 | 5.97 | 34.30 | | 27.03 | 104 | 1.00 |
| 386 | 6.72 | 34.21 | | 120 | 600 | (5.42) | (34.34) | | (27.12) | (95) | (1.11) |
| 484 | 6.06 | 34.29 | | 106 | | | | | | | |
| 586 | 5.50 | 34.34 | | 96 | | | | | | | |
| CREST; October 9, 1952; 1124 GCT; 30°01.5'N, 120°07'W; sounding, 1350 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 22°. | | | | | | | | | | | 100.80 |
| 0 | 18.93 | 33.35 | | 411 | 0 | 18.93 | 33.35 | | 23.80 | 411 | 0.00 |
| 5 | 18.93 | 33.37 | | 410 | 10 | 18.94 | 33.39 | | 23.83 | 408 | 0.04 |
| 18 | 18.96 | 33.40 | | 408 | 20 | 18.96 | 33.40 | | 23.83 | 408 | 0.08 |
| 48 | 15.25 | 33.33 | | 330 | 30 | 18.95 | 33.39 | | 23.83 | 409 | 0.12 |
| 72 | 14.00 | 33.19 | | 315 | 50 | 15.10 | 33.32 | | 24.68 | 327 | 0.20 |
| 100 | 12.17 | 33.10 | | 287 | 75 | 13.82 | 33.18 | | 24.84 | 312 | 0.28 |
| 151 | 9.42 | 33.48 | | 213 | 100 | 12.17 | 33.10 | | 25.10 | 287 | 0.35 |
| 203 | 8.62 | 33.93 | | 167 | 150 | 9.44 | 33.47 | | 25.87 | 214 | 0.48 |
| 259 | 7.75 | 34.07 | | 144 | 200 | 8.69 | 33.91 | | 26.33 | 170 | 0.58 |
| 305 | 7.09 | 34.14 | | 130 | 250 | 7.89 | 34.05 | | 26.57 | 148 | 0.66 |
| 413 | 6.38 | 34.25 | | 113 | 300 | 7.16 | 34.13 | | 26.73 | 132 | 0.73 |
| 517 | 5.90 | 34.36 | | 99 | 400 | 6.46 | 34.23 | | 26.91 | 116 | 0.86 |
| 620 | 5.20 | 34.43 | | 86 | 500 | 5.99 | 34.34 | | 27.05 | 102 | 0.97 |
| 824 | 4.44 | 34.52 | | 71 | 600 | 5.32 | 34.42 | | 27.20 | 88 | 1.07 |
| 1037 | 3.80 | 34.56 | | 61 | 700 | 4.88 | 34.47 | | 27.29 | 79 | 1.17 |
| 1234 | 3.29 | 34.58 | | 55 | 800 | 4.52 | 34.51 | | 27.36 | 72 | 1.25 |
| | | | | | 1000 | 3.91 | 34.56 | | 27.47 | 62 | 1.40 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

103.30 PAOLINA-T; October 8, 1952; 2140 GCT; 31°04'N, 116°25'W; sounding, 43 fm; wind, 300°, force 4; weather, clear; sea, very rough; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.65 | 33.26 | 6.04 | 323 | 0 | 14.65 | 33.26 | 6.04 | 24.73 | 323 | 0.00 |
| 10 | 14.62 | 33.28 | 6.29 | 321 | 10 | 14.62 | 33.28 | 6.29 | 24.75 | 321 | 0.03 |
| 20 | 13.91 | 33.24 | 6.31 | 309 | 20 | 13.91 | 33.24 | 6.31 | 24.87 | 309 | 0.06 |
| 30 | 12.10 | 33.22 | 5.84 | 277 | 30 | 12.10 | 33.22 | 5.84 | 25.21 | 277 | 0.09 |

103.35 PAOLINA-T; October 8, 1952; 1640, 1707 GCT; 30°54'N, 116°47.5'W; sounding, 1200 fm; wind, 330°, force 4; weather, clear; sea, very rough; wire angle, 05°, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.48 | 33.46 | 5.38 | 392 | 0 | 18.48 | 33.46 | 5.38 | 24.00 | 392 | 0.00 |
| 10 | 18.48 | 33.35 | 5.43 | 400 | 10 | 18.48 | 33.35 | 5.43 | 23.91 | 400 | 0.04 |
| 25 | 18.40 | 33.39 | 5.50 | 395 | 20 | 18.44 | 33.38 | 5.47 | 23.95 | 397 | 0.08 |
| 40 | 12.29 | 33.28 | 5.53 | 276 | 30 | 16.50 | 33.38 | 5.51 | 24.41 | 353 | 0.12 |
| 59 | 10.83 | 33.37 | 4.93 | 244 | 50 | 11.44 | 33.30 | 5.40 | 25.39 | 259 | 0.18 |
| 73 | 10.22 | 33.55 | 4.03 | 220 | 75 | 10.20 | 33.56 | 4.00 | 25.82 | 219 | 0.24 |
| 93 | 9.95 | 33.64 | 3.65 | 209 | 100 | 9.81 | 33.67 | 3.61 | 25.97 | 205 | 0.29 |
| 117 | 9.37 | 33.82 | 3.51 | 187 | 150 | 9.25 | 34.09 | 2.52 | 26.39 | 165 | 0.39 |
| 145 | 9.24 | 34.04 | 2.67 | 168 | 200 | 9.25 | 34.26 | 1.57 | 26.52 | 152 | 0.47 |
| 174 | 9.34 | 34.25 | 1.89 | 154 | 250 | 8.92 | 34.30 | 1.20 | 26.60 | 144 | 0.54 |
| 230 | 9.06 | 34.27 | 1.29 | 149 | 300 | 8.46 | 34.35 | 1.07 | 26.71 | 134 | 0.62 |
| | | | | | 400 | 7.15 | 34.34 | 0.73 | 26.90 | 116 | 0.75 |
| 287 | 8.63 | 34.35 | 1.08 | 136 | 500 | 6.29 | 34.35 | 0.42 | 27.02 | 104 | 0.86 |
| 345 | 7.70 | 34.34 | 0.99 | 124 | 600 | 5.69 | 34.39 | 0.31 | 27.13 | 94 | 0.97 |
| 457 | 6.64 | 34.34 | 0.52 | 110 | 700 | (5.20) | (34.42) | | (27.21) | (86) | (1.07) |
| 572 | 5.84 | 34.38 | 0.31 | 97 | | | | | | | |
| 687 | 5.26 | 34.42 | 0.33 | 87 | | | | | | | |

103.40 PAOLINA-T; October 8, 1952; 1056, 1211 GCT; 30°46'N, 117°06'W; sounding, 940 fm; wind, 280°, force 4; weather, clear; sea, very rough; wire angle, 27°, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.12 | 33.44 | 5.47 | 409 | 0 | 19.12 | 33.44 | 5.47 | 23.82 | 409 | 0.00 |
| 8 | 19.10 | 33.42 | 5.69 | 410 | 10 | 19.09 | 33.42 | 5.73 | 23.81 | 410 | 0.04 |
| 18 | 19.09 | 33.46 | 5.89 | 407 | 20 | 19.08 | 33.46 | 5.99 | 23.85 | 407 | 0.08 |
| 31 | 14.42 | 33.29 | 6.64 | 316 | 30 | 15.65 | 33.29 | 6.65 | 24.53 | 341 | 0.12 |
| 44 | 13.09 | 33.37 | 6.34 | 284 | 50 | 12.72 | 33.34 | 5.60 | 25.18 | 279 | 0.18 |
| | | | | | 75 | 11.25 | 33.41 | 4.49 | 25.51 | 248 | 0.25 |
| 58 | 11.76 | 33.30 | 5.18 | 265 | 100 | 10.17 | 33.64 | 3.07 | 25.88 | 213 | 0.31 |
| 72 | 11.30 | 33.37 | 4.57 | 252 | 150 | 9.55 | 33.89 | 2.81 | 26.18 | 184 | 0.41 |
| 89 | 10.46 | 33.57 | 3.93 | 223 | 200 | 9.21 | 34.22 | 1.56 | 26.49 | 155 | 0.49 |
| 112 | - | 33.71 | 2.85 | | | | | | | | |
| 137 | 9.69 | 33.82 | 2.96 | 192 | | | | | | | |
| 178 | 9.34 | 34.09 | 2.25 | 166 | | | | | | | |
| 220 | 9.04 | 34.34 | 1.18 | 143 | | | | | | | |

107.32 PAOLINA-T; October 9, 1952; 0258 GCT; 30°26'N, 116°11.5'W; sounding, 360 fm; wind, 320°, force 1; weather, clear; sea, rough; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.10 | 33.26 | 5.87 | 353 | 0 | 16.10 | 33.26 | 5.87 | 24.41 | 353 | 0.00 |
| 10 | 16.12 | 33.24 | 5.84 | 355 | 10 | 16.12 | 33.24 | 5.84 | 24.39 | 355 | 0.04 |
| 20 | 15.86 | 33.24 | 5.94 | 349 | 20 | 15.86 | 33.24 | 5.94 | 24.45 | 349 | 0.07 |
| 30 | 14.62 | 33.17 | 6.26 | 329 | 30 | 14.62 | 33.17 | 6.26 | 24.66 | 329 | 0.10 |
| 50 | - | 33.30 | 5.63 | | 50 | 12.82 | 33.30 | 5.63 | 25.13 | 284 | 0.17 |
| 74 | 11.12 | 33.42 | 4.38 | 245 | 75 | 11.09 | 33.42 | 4.35 | 25.55 | 244 | 0.23 |
| 99 | 10.55 | 33.66 | 3.30 | 217 | 100 | (10.52) | (33.67) | (3.21) | (25.85) | (216) | (0.29) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

PAOLINA-T; October 9, 1952; 0536 GCT; 30°18'N, 116°23.5'W; sounding, 1050 fm; wind, 300°, force 4; weather, clear; sea, very rough; wire angle, 18°. 107.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.19 | 33.37 | 5.04 | 416 | 0 | 19.19 | 33.37 | 5.04 | 23.75 | 416 | 0.00 |
| 10 | 19.17 | 33.39 | 5.45 | 414 | 10 | 19.17 | 33.39 | 5.45 | 23.77 | 414 | 0.04 |
| 19 | 19.17 | 33.40 | 5.32 | 413 | 20 | 19.17 | 33.40 | 5.32 | 23.78 | 413 | 0.08 |
| 33 | 17.49 | 33.25 | 5.25 | 385 | 30 | 19.15 | 33.39 | 5.26 | 23.78 | 413 | 0.12 |
| 52 | 14.71 | 33.19 | 5.18 | 329 | 50 | 15.00 | 33.20 | 5.19 | 24.61 | 334 | 0.20 |
| 66 | 13.00 | 33.17 | 5.21 | 297 | 75 | 12.20 | 33.19 | 5.18 | 25.17 | 281 | 0.28 |
| 79 | 11.96 | 33.22 | 5.14 | 274 | 100 | 10.20 | 33.37 | 4.53 | 25.67 | 233 | 0.34 |
| 102 | 10.08 | 33.39 | 4.35 | 230 | 150 | 9.37 | 33.91 | 2.76 | 26.23 | 180 | 0.45 |
| 124 | - | 33.68 | 3.29 | | 200 | 9.16 | 34.18 | 2.04 | 26.47 | 157 | 0.53 |
| 150 | 9.37 | 33.91 | 2.76 | 180 | 250 | 9.08 | 34.33 | 1.21 | 26.60 | 144 | 0.61 |
| 197 | 9.18 | 34.16 | 2.10 | 159 | 300 | 8.29 | 34.33 | 0.97 | 26.72 | 133 | 0.68 |
| 251 | 9.07 | 34.33 | 1.19 | 144 | 400 | 7.18 | 34.32 | 0.73 | 26.88 | 118 | 0.81 |
| 295 | 8.40 | 34.33 | 0.98 | 134 | 500 | 6.52 | 34.36 | 0.63 | 27.00 | 107 | 0.93 |
| 399 | 7.20 | 34.32 | 0.74 | 118 | 600 | 5.58 | 34.38 | 0.38 | 27.14 | 94 | 1.04 |
| 502 | 6.50 | 34.36 | 0.62 | 106 | | | | | | | |
| 608 | 5.52 | 34.38 | 0.35 | 93 | | | | | | | |

PAOLINA-T; October 9, 1952; 0933 GCT; 30°10'N, 116°45'W; sounding, 1690 fm; wind, 310°, force 4; weather, partly cloudy; sea, very rough; wire angle, 22°. 107.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.03 | 33.49 | 5.23 | 428 | 0 | 20.03 | 33.49 | 5.23 | 23.62 | 428 | 0.00 |
| 10 | 20.00 | 33.42 | 5.21 | 432 | 10 | 20.00 | 33.42 | 5.21 | 23.58 | 432 | 0.04 |
| 18 | 19.71 | 33.42 | 5.23 | 425 | 20 | 19.68 | 33.42 | 5.24 | 23.66 | 424 | 0.09 |
| 31 | 19.50 | 33.35 | 5.30 | 425 | 30 | 19.51 | 33.35 | 5.30 | 23.65 | 425 | 0.13 |
| 49 | 16.40 | 33.28 | 5.97 | 358 | 50 | 16.10 | 33.27 | 5.97 | 24.42 | 352 | 0.21 |
| 61 | 14.40 | 33.19 | 5.98 | 323 | 75 | 13.40 | 33.40 | 5.79 | 25.09 | 288 | 0.29 |
| 74 | 13.44 | 33.40 | 5.83 | 288 | 100 | 11.08 | 33.40 | 4.08 | 25.54 | 246 | 0.35 |
| 94 | 11.32 | 33.39 | 4.60 | 250 | 150 | 9.50 | 33.88 | 3.32 | 26.18 | 184 | 0.46 |
| 116 | - | 33.64 | 3.63 | | 200 | 8.98 | 34.12 | 2.58 | 26.45 | 159 | 0.55 |
| 140 | 9.79 | 33.39u | 3.44 | | 250 | 8.97 | 34.34 | 1.36 | 26.63 | 142 | 0.63 |
| 186 | 9.00 | 34.07 | 2.90 | 163 | 300 | 8.90 | 34.45 | 0.78 | 26.72 | 133 | 0.70 |
| 237 | 8.97 | 34.27 | 1.70 | 147 | 400 | 7.70 | 34.44 | 0.53 | 26.90 | 116 | 0.83 |
| 281 | 8.97 | 34.45 | 0.85 | 134 | 500 | 6.36 | 34.37 | 0.53 | 27.03 | 104 | 0.95 |
| 385 | 7.93 | 34.45 | 0.52 | 119 | 600 | (5.63) | (34.36) | (0.31) | (27.11) | (96) | (1.05) |
| 488 | 6.48 | 34.38 | 0.57 | 105 | | | | | | | |
| 594 | 5.68 | 34.36 | 0.32 | 96 | | | | | | | |

PAOLINA-T; October 10, 1952; 1724 GCT; 29°48.5'N, 115°51'W; sounding, 40 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 05°. 110.33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.25 | 33.33 | 5.91 | 351 | 0 | 16.25 | 33.33 | 5.91 | 24.43 | 351 | 0.00 |
| 10 | 16.14 | 33.30 | 5.99 | 351 | 10 | 16.14 | 33.30 | 5.99 | 24.43 | 351 | 0.04 |
| 20 | 14.22 | 33.22 | 6.15 | 317 | 20 | 14.22 | 33.22 | 6.15 | 24.79 | 317 | 0.07 |
| 30 | 13.47 | 33.24 | 5.97 | 301 | 30 | 13.47 | 33.24 | 5.97 | 24.96 | 301 | 0.10 |

PAOLINA-T; October 10, 1952; 1512 GCT; 29°42'N, 115°55.5'W; sounding, 650 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 13°. 110.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.03 | 33.34 | 5.54 | 390 | 0 | 18.03 | 33.34 | 5.54 | 24.02 | 390 | 0.00 |
| 10 | 18.04 | 33.37 | 5.52 | 389 | 10 | 18.04 | 33.37 | 5.52 | 24.04 | 389 | 0.04 |
| 20 | 18.01 | 33.35 | 5.50 | 389 | 20 | 18.01 | 33.35 | 5.50 | 24.03 | 389 | 0.08 |
| 34 | 15.46 | 33.37 | 6.08 | 331 | 30 | 17.90 | 33.36 | 6.00 | 24.06 | 386 | 0.12 |
| 50 | 12.97 | 33.19 | 5.82 | 295 | 50 | 12.97 | 33.19 | 5.82 | 25.02 | 295 | 0.19 |
| 63 | 12.25 | 33.33 | 5.25 | 271 | 75 | 11.67 | 33.46 | 4.67 | 25.48 | 251 | 0.25 |
| 78 | 11.57 | 33.47 | 4.64 | 249 | 100 | 10.95 | 33.54 | 4.04 | 25.67 | 233 | 0.31 |
| 97 | 11.00 | 33.53 | 4.07 | 235 | 150 | 9.49 | 33.91 | 3.08 | 26.21 | 182 | 0.42 |
| 121 | - | 33.68 | 3.88 | | 200 | 9.22 | 34.16 | 2.19 | 26.45 | 159 | 0.51 |
| 148 | 9.51 | 33.89 | 3.14 | 184 | 250 | 8.70 | 34.29 | 1.43 | 26.63 | 142 | 0.58 |
| 193 | 9.28 | 34.14 | 2.30 | 162 | 300 | 8.64 | 34.39 | 0.88 | 26.72 | 133 | 0.66 |
| 238 | 8.72 | 34.25 | 1.68 | 145 | 400 | 7.98 | 34.42 | 0.52 | 26.84 | 122 | 0.79 |
| 284 | 8.69 | 34.38 | 0.96 | 135 | 500 | 6.76 | 34.39 | 0.37 | 26.99 | 107 | 0.91 |
| 382 | 8.13 | 34.42 | 0.55 | 124 | 600 | (5.75) | (34.38) | | (27.12) | (96) | (1.02) |
| 477 | 7.08 | 34.39 | 0.39 | 112 | | | | | | | |
| 582 | 5.90 | 34.38 | 0.31 | 97 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

110.40 PAOLINA-T; October 10, 1952; 1110 GCT; 29°33'N, 116°16'W; sounding, 1350 fm; wind, 290°, force 3; weather, overcast; sea, rough; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.65 | 33.42 | 5.22 | 423 | 0 | 19.65 | 33.42 | 5.22 | 23.67 | 423 | 0.00 |
| 10 | 19.65 | 33.37 | 5.20 | 427 | 10 | 19.65 | 33.37 | 5.20 | 23.63 | 427 | 0.04 |
| 19 | 19.58 | 33.37 | 5.21 | 425 | 20 | 19.56 | 33.37 | 5.24 | 23.66 | 425 | 0.09 |
| 34 | 18.78 | 33.35 | 5.70 | 407 | 30 | 19.17 | 33.36 | 5.50 | 23.75 | 416 | 0.13 |
| 48 | 17.00 | 33.31 | 6.04 | 369 | 50 | 16.70 | 33.31 | 6.08 | 24.31 | 362 | 0.21 |
| 62 | 15.14 | 33.31 | 6.28 | 329 | 75 | 13.89 | 33.30 | 6.06 | 24.92 | 305 | 0.29 |
| 76 | 13.88 | 33.30 | 6.04 | 304 | 100 | 11.97 | 33.46 | 4.75 | 25.42 | 257 | 0.36 |
| 94 | 12.36 | 33.46 | 4.82 | 264 | 150 | 9.72 | 33.70 | 3.80 | 26.01 | 201 | 0.48 |
| 116 | - | 33.46 | 4.56 | | 200 | 9.39 | 34.14 | 2.21 | 26.40 | 163 | 0.57 |
| 144 | 9.78 | 33.64 | 4.10 | 206 | 250 | 9.07 | 34.29 | 1.44 | 26.57 | 147 | 0.65 |
| 188 | 9.44 | 34.09 | 2.39 | 168 | 300 | 8.55 | 34.36 | 0.97 | 26.71 | 134 | 0.72 |
| 233 | 9.23 | 34.25 | 1.69 | 153 | 400 | 7.66 | 34.41 | 0.54 | 26.88 | 118 | 0.85 |
| 279 | 8.77 | 34.34 | 1.10 | 139 | 500 | 6.93 | 34.42 | 0.36 | 26.99 | 107 | 0.97 |
| 376 | 7.85 | 34.40 | 0.61 | 121 | | | | | | | |
| 471 | 7.20 | 34.42 | 0.39 | 111 | | | | | | | |
| 574 | 6.12 | 34.42 | 0.30 | 97 | | | | | | | |

110.50 PAOLINA-T; October 10, 1952; 0355 GCT; 29°14'N, 116°56.5'W; sounding, 2150 fm; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.21 | 33.46 | 5.17 | 434 | 0 | 20.21 | 33.46 | 5.17 | 23.55 | 434 | 0.00 |
| 10 | 20.20 | 33.44 | 5.20 | 436 | 10 | 20.20 | 33.44 | 5.20 | 23.54 | 436 | 0.04 |
| 30 | 18.07 | 33.30 | 5.71 | 394 | 20 | 20.15 | 33.38 | 5.40 | 23.51 | 439 | 0.09 |
| 59 | 14.91 | 33.28 | 5.99 | 326 | 30 | 18.07 | 33.30 | 5.71 | 23.98 | 394 | 0.13 |
| 84 | 12.37 | 33.42 | 5.47 | 267 | 50 | 15.80 | 33.28 | 5.95 | 24.49 | 345 | 0.20 |
| 119 | 10.54 | 33.60 | 3.76 | 222 | 75 | 13.22 | 33.32 | 5.74 | 25.07 | 290 | 0.28 |
| 177 | 9.24 | 34.20 | 2.77 | 157 | 100 | 11.30 | 33.51 | 4.43 | 25.58 | 241 | 0.35 |
| 237 | 8.91 | 34.20 | 1.68 | 152 | 150 | 10.40 | 34.00 | 3.27 | 26.12 | 190 | 0.46 |
| 296 | - | 34.23 | 1.52 | | 200 | 9.14 | 34.20 | 2.23 | 26.49 | 155 | 0.55 |
| 355 | 7.69 | 34.38 | 0.74 | 121 | 250 | 8.81 | 34.20 | 1.64 | 26.54 | 150 | 0.63 |
| 466 | 6.80 | 34.38 | 0.33 | 109 | 300 | 8.26 | 34.24 | 1.49 | 26.66 | 139 | 0.70 |
| 585 | 5.94 | 34.36 | 0.27 | 99 | 400 | 7.30 | 34.38 | 0.50 | 26.91 | 115 | 0.83 |
| 696 | 5.20 | 34.40 | 0.41 | 88 | 500 | 6.54 | 34.37 | 0.30 | 27.01 | 106 | 0.95 |
| 926 | 4.40 | 34.54 | 0.45 | 69 | 600 | 5.83 | 34.37 | 0.29 | 27.10 | 97 | 1.06 |
| 1148 | 3.62 | 34.56 | 0.78 | 60 | 700 | 5.18 | 34.40 | 0.41 | 27.20 | 88 | 1.16 |
| 1360 | 3.17 | 34.58 | 0.99 | 54 | 800 | 4.79 | 34.46 | 0.42 | 27.29 | 79 | 1.25 |
| | | | | | 1000 | 4.14 | 34.55 | 0.51 | 27.44 | 65 | 1.41 |

110.60 PAOLINA-T; October 9, 1952; 2105 GCT; 28°55'N, 117°37.5'W; sounding, 2100 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.75 | 33.55 | 5.21 | 442 | 0 | 20.75 | 33.55 | 5.21 | 23.48 | 442 | 0.00 |
| 8 | 20.73 | 33.57 | 5.28 | 440 | 10 | 20.72 | 33.57 | 5.20 | 23.50 | 439 | 0.04 |
| 18 | 20.67 | 33.55 | 5.28 | 440 | 20 | 20.65 | 33.55 | 5.27 | 23.51 | 439 | 0.09 |
| 31 | 20.61 | 33.57 | 5.21 | 437 | 30 | 20.61 | 33.57 | 5.21 | 23.53 | 437 | 0.13 |
| 48 | 15.58 | 33.39 | 6.15 | 332 | 50 | 14.90 | 33.39 | 6.21 | 24.77 | 318 | 0.21 |
| 61 | 13.74 | 33.46 | 6.37 | 290 | 75 | 11.82 | 33.46 | 4.91 | 25.45 | 254 | 0.28 |
| 74 | 12.03 | 33.46 | 4.93 | 258 | 100 | 10.10 | 33.47 | 4.25 | 25.76 | 224 | 0.34 |
| 95 | 10.32 | 33.46 | 4.54 | 228 | 150 | 9.00 | 33.88 | 3.40 | 26.26 | 177 | 0.44 |
| 115 | 9.64 | 33.64 | 3.84 | 204 | 200 | 8.69 | 34.17 | 2.18 | 26.54 | 151 | 0.52 |
| 138 | - | 33.82 | 3.57 | | 250 | 8.24 | 34.20 | 1.84 | 26.63 | 142 | 0.60 |
| 180 | 8.66 | 34.02 | 2.95 | 161 | 300 | 7.34 | 34.18 | 1.47 | 26.75 | 131 | 0.67 |
| 223 | 8.72 | 34.27 | 1.75 | 144 | 400 | 6.67 | 34.24 | 0.73 | 26.89 | 117 | 0.80 |
| 261 | 7.86 | 34.18 | 1.86 | 138 | 500 | 6.24 | 34.38 | 0.39 | 27.05 | 102 | 0.92 |
| 353 | 6.94 | 34.20 | 0.94 | 124 | | | | | | | |
| 446 | 6.42 | 34.31 | 0.55 | 109 | | | | | | | |
| 548 | 6.10 | 34.43 | 0.23 | 96 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| PAOLINA-T; October 10, 1952; 2223 GCT; 29°22.5'N, 115°22'W; sounding, 42 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 15°. | | | | | | | | | | | 113.30 |
| 0 | 17.51 | 33.37 | | 376 | 0 | 17.51 | 33.37 | | 24.16 | 376 | 0.00 |
| 9 | 15.37 | 33.26 | | 337 | 10 | 15.25 | 33.26 | | 24.60 | 335 | 0.04 |
| 19 | 14.69 | 33.31 | | 320 | 20 | 14.62 | 33.31 | | 24.77 | 318 | 0.07 |
| 30 | 13.32 | 33.32 | | 292 | 30 | 13.32 | 33.32 | | 25.05 | 292 | 0.10 |
| PAOLINA-T; October 11, 1952; 0409 GCT; 29°02'N, 115°58.5'W; sounding, 1050 fm; wind, 330°, force 4; weather, clear; sea, rough; wire angle, 06°. | | | | | | | | | | | 113.40 |
| 0 | 18.21 | 33.33 | 5.56 | 395 | 0 | 18.21 | 33.33 | 5.56 | 23.96 | 395 | 0.00 |
| 10 | 17.98 | 33.31 | 5.67 | 391 | 10 | 17.98 | 33.31 | 5.67 | 24.00 | 391 | 0.04 |
| 20 | 15.65 | 33.33 | 5.98 | 338 | 20 | 15.65 | 33.33 | 5.98 | 24.56 | 338 | 0.08 |
| 35 | 14.25 | 33.37 | 5.95 | 306 | 30 | 14.70 | 33.36 | 5.96 | 24.79 | 316 | 0.11 |
| 55 | 12.32 | 33.42 | 4.68 | 266 | 50 | 12.90 | 33.41 | 4.71 | 25.20 | 277 | 0.17 |
| 70 | 10.85 | 33.44 | 4.77 | 239 | 75 | 10.72 | 33.47 | 4.68 | 25.66 | 234 | 0.23 |
| 85 | 10.63 | 33.66 | 3.58 | 219 | 100 | 11.21 | 33.98 | 1.38 | 25.96 | 205 | 0.29 |
| 109 | 11.28 | 34.22 | 1.27 | 189 | 150 | 10.21 | 34.26 | 1.80 | 26.36 | 168 | 0.38 |
| 134 | - | 34.31 | 1.24 | | 200 | 10.03 | 34.41 | 1.20 | 26.51 | 154 | 0.46 |
| 163 | 10.06 | 34.19 | 1.94 | 170 | 250 | 9.80 | 34.51 | 0.80 | 26.62 | 142 | 0.54 |
| 217 | 10.02 | 34.47 | 0.95 | 149 | 300 | 9.02 | 34.45 | 0.79 | 26.70 | 135 | 0.61 |
| 277 | 9.50 | 34.51 | 0.76 | 138 | 400 | 7.57 | 34.36 | 0.57 | 26.86 | 120 | 0.75 |
| 325 | 8.34 | 34.38 | 0.87 | 130 | 500 | 6.76 | 34.36 | 0.39 | 26.97 | 110 | 0.87 |
| 439 | 7.26 | 34.36 | 0.41 | 116 | 600 | 5.91 | 34.39 | 0.33 | 27.10 | 97 | 0.98 |
| 549 | 6.33 | 34.36 | 0.38 | 104 | | | | | | | |
| 656 | 5.56 | 34.43 | 0.28 | 90 | | | | | | | |
| PAOLINA-T; October 11, 1952; 1918 GCT; 28°54'N, 114°39.5'W; sounding, 42 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | | 117.26 |
| 0 | 19.06 | 33.37 | 5.39 | 413 | 0 | 19.06 | 33.37 | 5.39 | 23.78 | 413 | 0.00 |
| 10 | 18.07 | 33.35 | 5.57 | 391 | 10 | 18.07 | 33.35 | 5.57 | 24.01 | 391 | 0.04 |
| 20 | 16.53 | 33.33 | 5.81 | 357 | 20 | 16.53 | 33.33 | 5.81 | 24.36 | 357 | 0.08 |
| 30 | 14.68 | 33.28 | 5.73 | 322 | 30 | 14.68 | 33.28 | 5.73 | 24.74 | 322 | 0.11 |
| 50 | 12.26 | 33.37 | 4.24 | 269 | 50 | 12.26 | 33.37 | 4.24 | 25.30 | 269 | 0.17 |
| PAOLINA-T; October 11, 1952; 1639 GCT; 28°47'N, 114°56'W; sounding, 58 fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 03°. | | | | | | | | | | | 117.30 |
| 0 | 17.47 | 33.34 | 5.77 | 378 | 0 | 17.47 | 33.34 | 5.77 | 24.15 | 378 | 0.00 |
| 10 | 17.34 | 33.30 | 5.65 | 378 | 10 | 17.34 | 33.30 | 5.65 | 24.15 | 378 | 0.04 |
| 20 | 13.88 | 33.34 | 5.54 | 301 | 20 | 13.88 | 33.34 | 5.54 | 24.95 | 301 | 0.07 |
| 30 | 12.71 | 33.22 | 5.66 | 288 | 30 | 12.71 | 33.22 | 5.66 | 25.09 | 288 | 0.10 |
| 50 | 12.32 | 33.44 | 4.22 | 264 | 50 | 12.32 | 33.44 | 4.22 | 25.34 | 264 | 0.16 |
| PAOLINA-T; October 11, 1952; 1004 GCT; 28°29'N, 115°37'W; sounding, 600 fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 17°. | | | | | | | | | | | 117.40 |
| 0 | 18.46 | 33.48 | 5.52 | 390 | 0 | 18.46 | 33.48 | 5.52 | 24.02 | 390 | 0.00 |
| 10 | 18.47 | 33.46 | 5.54 | 392 | 10 | 18.47 | 33.46 | 5.54 | 24.00 | 392 | 0.04 |
| 19 | 15.47 | 33.30 | - | 337 | 20 | 15.40 | 33.30 | | 24.60 | 335 | 0.08 |
| 33 | 14.57 | 33.30 | 6.01 | 318 | 30 | 14.78 | 33.30 | 5.98 | 24.73 | 322 | 0.11 |
| 48 | 13.39 | 33.33 | 5.55 | 293 | 50 | 13.20 | 33.34 | 5.45 | 25.09 | 288 | 0.17 |
| 62 | 12.01 | 33.46 | 4.55 | 257 | 75 | 11.45 | 33.70 | 3.27 | 25.70 | 230 | 0.23 |
| 76 | 11.44 | 33.71 | 3.23 | 229 | 100 | 11.72 | 33.98 | 2.27 | 25.87 | 214 | 0.29 |
| 95 | 11.73 | 33.98 | 2.24 | 214 | 150 | 10.21 | 34.11 | 2.10 | 26.24 | 179 | 0.39 |
| 118 | - | 33.89 | 2.91 | | 200 | 9.72 | 34.26 | 1.69 | 26.44 | 160 | 0.48 |
| 145 | 10.25 | 34.09 | 2.13 | 181 | 250 | 9.61 | 34.38 | 1.13 | 26.55 | 149 | 0.56 |
| 191 | 9.72 | 34.23 | 1.79 | 162 | 300 | 9.03 | 34.40 | 0.83 | 26.66 | 139 | 0.63 |
| 237 | 9.70 | 34.36 | 1.26 | 152 | 400 | 7.85 | 34.36 | 0.59 | 26.81 | 124 | 0.77 |
| 282 | 9.22 | 34.40 | 0.86 | 141 | 500 | 6.66 | 34.36 | 0.42 | 26.98 | 108 | 0.89 |
| 380 | 8.10 | 34.36 | 0.63 | 128 | | | | | | | |
| 475 | 6.95 | 34.36 | 0.45 | 112 | | | | | | | |
| 576 | 5.92 | 34.34 | 0.33 | 101 | | | | | | | |

SIO

CCOFI 5210

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

120.25 PAOLINA-T; October 12, 1952; 0009 GCT; 28°24'N, 114°15.5'W; sounding, 44 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.94 | 33.37 | 5.43 | 410 | 0 | 18.94 | 33.37 | 5.43 | 23.81 | 410 | 0.00 |
| 10 | 18.70 | 33.35 | 5.47 | 406 | 10 | 18.70 | 33.35 | 5.47 | 23.86 | 406 | 0.04 |
| 20 | 17.82 | 33.35 | 5.59 | 385 | 20 | 17.82 | 33.35 | 5.59 | 24.07 | 385 | 0.08 |
| 31 | 16.35 | 33.37 | 5.83 | 350 | 30 | 16.40 | 33.37 | 5.80 | 24.42 | 351 | 0.12 |

120.30 PAOLINA-T; October 13, 1952; 0817 GCT; 28°11'N, 114°35.5'W; sounding, 50 fm; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.14 | 33.49 | 5.25 | 431 | 0 | 20.14 | 33.49 | 5.25 | 23.60 | 431 | 0.00 |
| 10 | 20.14 | 33.46 | 5.18 | 433 | 10 | 20.14 | 33.46 | 5.18 | 23.57 | 433 | 0.04 |
| 20 | 20.16 | 33.48 | 5.24 | 432 | 20 | 20.16 | 33.48 | 5.24 | 23.58 | 432 | 0.09 |
| 30 | 20.13 | 33.49 | 5.25 | 430 | 30 | 20.13 | 33.49 | 5.25 | 23.60 | 430 | 0.13 |
| 50 | 18.56 | 33.44 | 5.35 | 396 | 50 | 18.56 | 33.44 | 5.35 | 23.96 | 396 | 0.21 |

120.35 PAOLINA-T; October 13, 1952; 1141 GCT; 27°59'N, 114°57'W; sounding, 47 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.80 | 33.48 | 5.30 | 423 | 0 | 19.80 | 33.48 | 5.30 | 23.68 | 423 | 0.00 |
| 10 | 19.83 | 33.46 | 5.25 | 425 | 10 | 19.83 | 33.46 | 5.25 | 23.65 | 425 | 0.04 |
| 20 | 19.79 | 33.48 | 5.18 | 423 | 20 | 19.79 | 33.48 | 5.18 | 23.68 | 423 | 0.08 |
| 30 | 19.70 | 33.44 | 5.23 | 423 | 30 | 19.70 | 33.44 | 5.23 | 23.67 | 423 | 0.13 |
| 50 | 18.44 | 33.38 | 5.35 | 397 | 50 | 18.44 | 33.38 | 5.35 | 23.95 | 397 | 0.21 |

120.45 PAOLINA-T; October 13, 1952; 2220 GCT; 27°42'N, 115°36'W; sounding, 1470 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.19 | 33.44 | 5.36 | 411 | 0 | 19.19 | 33.44 | 5.36 | 23.80 | 411 | 0.00 |
| 10 | 19.18 | 33.44 | 5.36 | 410 | 10 | 19.18 | 33.44 | 5.36 | 23.81 | 410 | 0.04 |
| 25 | 16.21 | 33.33 | 6.07 | 350 | 20 | 19.00 | 33.33 | 5.91 | 23.77 | 414 | 0.08 |
| 50 | 13.77 | 33.34 | 5.22 | 299 | 30 | 15.60 | 33.33 | 6.00 | 24.57 | 337 | 0.12 |
| 75 | 11.18 | 33.80 | 4.20 | 218 | 50 | 13.77 | 33.34 | 5.22 | 24.97 | 299 | 0.18 |
| 100 | 10.40 | 33.71 | 3.48 | 211 | 75 | 11.18 | 33.80 | 4.20 | 25.83 | 218 | 0.25 |
| 154 | 10.04 | 34.14 | 1.97 | 174 | 100 | 10.40 | 33.71 | 3.48 | 25.90 | 211 | 0.30 |
| 203 | 10.82 | 34.60 | 0.47 | 153 | 150 | 10.09 | 34.08 | 2.12 | 26.24 | 179 | 0.40 |
| 251 | - | 34.51 | 0.57 | | 200 | 10.82 | 34.59 | 0.50 | 26.51 | 153 | 0.49 |
| 299 | 9.10 | 34.45 | 0.60 | 136 | 250 | 10.24 | 34.51 | 0.56 | 26.55 | 150 | 0.57 |
| 400 | 7.59 | 34.42 | 0.48 | 116 | 300 | 9.07 | 34.45 | 0.60 | 26.70 | 135 | 0.64 |
| 498 | 6.91 | 34.42 | 0.28 | 107 | 400 | 7.59 | 34.42 | 0.48 | 26.90 | 116 | 0.77 |
| 600 | 5.60 | 34.42 | 0.27 | 91 | 500 | 6.88 | 34.42 | 0.28 | 27.00 | 107 | 0.89 |
| 800 | 4.66 | 34.45 | 0.36 | 78 | 600 | 5.60 | 34.42 | 0.27 | 27.17 | 91 | 1.00 |
| 998 | 3.90 | 34.56 | 0.60 | 62 | 700 | 5.07 | 34.43 | 0.30 | 27.24 | 84 | 1.09 |
| 1203 | 3.50 | 34.72u | 0.80 | | 800 | 4.66 | 34.45 | 0.36 | 27.30 | 78 | 1.[illegible] |
| | | | | | 1000 | 3.89 | (34.56) | 0.61 | (27.47) | (62) | (1.34) |

120.45 PAOLINA-T; October 13, 1952; 2342 GCT;[a] 27°42'N, 115°36'W; sounding, 1470 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 03°.

| | |
|---|---|
| 0 | 19.24 |
| 10 | 19.22 |
| 25 | 17.42 |
| 50 | 14.14 |
| 76 | 11.64 |
| 100 | 10.36 |
| 124 | 10.12 |
| 172 | 10.35 |
| 196 | 10.84 |
| 220 | 10.62 |
| 245 | 10.09 |
| 265 | 9.56 |
| 274 | 9.66 |
| 294 | 9.36 |

a) Bathythermograph calibration cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

PAOLINA-T; October 14, 1952; 0334 GCT; 27°32.5'N, 115°51.5'W; sounding, 2150 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 23°. 120.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.52 | 33.60 | 5.19 | 432 | 0 | 20.52 | 33.60 | 5.19 | 23.58 | 432 | 0.00 |
| 9 | 19.30 | 33.53 | 5.39 | 407 | 10 | 19.29 | 33.53 | 5.39 | 23.85 | 407 | 0.04 |
| 18 | 18.83 | 33.51 | 5.37 | 397 | 20 | 18.75 | 33.50 | 5.38 | 23.96 | 396 | 0.08 |
| 32 | 16.96 | 33.44 | 6.25 | 359 | 30 | 17.66 | 33.44 | 6.22 | 24.18 | 375 | 0.12 |
| 51 | 14.06 | 33.49 | 6.07 | 294 | 50 | 14.42 | 33.49 | 6.11 | 24.95 | 301 | 0.19 |
| 65 | 12.47 | 33.44 | 4.44 | 267 | 75 | 11.68 | 33.46 | 3.83 | 25.47 | 252 | 0.26 |
| 79 | 11.58 | 33.49 | 3.71 | 248 | 100 | 10.70 | 33.75 | 3.24 | 25.88 | 213 | 0.32 |
| 100 | 10.70 | 33.75 | 3.24 | 213 | 150 | 9.96 | 34.05 | 2.23 | 26.24 | 179 | 0.42 |
| 121 | - | 33.98 | 2.51 | | 200 | 9.42 | 34.26 | 1.75 | 26.49 | 155 | 0.50 |
| 148 | 9.98 | 34.05 | 2.26 | 179 | 250 | 8.96 | 34.31 | 1.28 | 26.60 | 144 | 0.58 |
| 196 | 9.48 | 34.25 | 1.79 | 157 | 300 | 8.74 | 34.29 | 0.81 | 26.62 | 142 | 0.65 |
| 252 | 8.96 | 34.31 | 1.24 | 144 | 400 | 7.30 | 34.27 | 0.54 | 26.82 | 123 | 0.79 |
| 297 | 8.78 | 34.23u | 0.81 | | 500 | 6.64 | 34.44 | 0.42 | 27.05 | 102 | 0.91 |
| 402 | 7.26 | 34.27 | 0.53 | 123 | 600 | 5.97 | 34.47 | 0.37 | 27.16 | 92 | 1.02 |
| 505 | 6.60 | 34.45 | 0.41 | 101 | | | | | | | |
| 612 | 5.89 | 34.47 | 0.36 | 91 | | | | | | | |

PAOLINA-T; October 14, 1952; 1015 GCT; 27°11'N, 116°30'W; sounding, 2150 fm; wind, 330°, force 2; weather, partly cloudy; sea, rough; wire angle, 21°. 120.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.73 | 33.57 | 5.20 | 440 | 0 | 20.73 | 33.57 | 5.20 | 23.50 | 440 | 0.00 |
| 9 | 20.72 | 33.53 | 5.14 | 442 | 10 | 20.72 | 33.53 | 5.14 | 23.47 | 442 | 0.04 |
| 23 | 20.73 | 33.51 | 5.14 | 444 | 20 | 20.73 | 33.51 | 5.14 | 23.45 | 444 | 0.09 |
| 46 | 16.65 | 33.28 | 5.79 | 364 | 30 | 20.70 | 33.50 | 5.22 | 23.46 | 444 | 0.13 |
| 69 | 15.78 | 33.62 | 5.79 | 320 | 50 | 16.41 | 33.29 | 5.79 | 24.36 | 358 | 0.21 |
| 93 | 13.81 | 33.46 | 5.64 | 291 | 75 | 15.45 | 33.61 | 5.77 | 24.82 | 314 | 0.30 |
| 141 | 9.83 | 33.66 | 4.21 | 206 | 100 | 12.90 | 33.47 | 5.48 | 25.25 | 273 | 0.37 |
| 185 | 9.54 | 34.02 | 2.94 | 175 | 150 | 9.69 | 33.71 | 4.01 | 26.02 | 200 | 0.49 |
| 228 | - | 34.43 | 0.85 | | 200 | 9.72 | 34.20 | 1.73 | 26.39 | 164 | 0.58 |
| 270 | 9.68 | 34.45 | 0.56 | 145 | 250 | 10.00 | 34.44 | 0.67 | 26.53 | 151 | 0.66 |
| 361 | 8.38 | 34.43 | 0.41 | 127 | 300 | 9.21 | 34.45 | 0.50 | 26.67 | 138 | 0.74 |
| 449 | 7.46 | 34.38 | 0.34 | 117 | 400 | 7.97 | 34.40 | 0.39 | 26.83 | 123 | 0.88 |
| 539 | 6.56 | 34.40 | 0.23 | 104 | 500 | 6.93 | 34.39 | 0.28 | 26.97 | 110 | 1.00 |
| 723 | 5.33 | 34.40 | 0.33 | 89 | 600 | 6.10 | 34.40 | 0.27 | 27.09 | 98 | 1.11 |
| 914 | 4.36 | 34.46 | 0.51 | 74 | 700 | 5.46 | 34.40 | 0.32 | 27.17 | 91 | 1.21 |
| 1117 | 3.75 | 34.49 | 0.80 | 66 | 800 | 4.89 | 34.42 | 0.40 | 27.25 | 83 | 1.31 |
| | | | | | 1000 | 4.06 | 34.48 | 0.63 | 27.39 | 70 | 1.48 |

PAOLINA-T; October 14, 1952; 1700 GCT; 26°50.5'N, 117°09'W; sounding, 2100 fm; wind, 310°, force 2; weather, cloudy; sea, rough; wire angle, 06°. 120.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.68 | 33.75 | 5.17 | 451 | 0 | 21.68 | 33.75 | 5.17 | 23.38 | 451 | 0.00 |
| 10 | 21.68 | 33.75 | 5.08 | 451 | 10 | 21.68 | 33.75 | 5.08 | 23.38 | 451 | 0.05 |
| 20 | 21.67 | 33.73 | 5.09 | 452 | 20 | 21.67 | 33.73 | 5.09 | 23.37 | 452 | 0.09 |
| 35 | 20.81 | 33.66 | 5.29 | 435 | 30 | 21.66 | 33.72 | 5.10 | 23.36 | 453 | 0.14 |
| 54 | 17.74 | 33.46 | 5.56 | 375 | 50 | 18.02 | 33.47 | 5.50 | 24.12 | 381 | 0.22 |
| 68 | 16.37 | 33.46 | 5.68 | 344 | 75 | 15.64 | 33.48 | 5.66 | 24.68 | 327 | 0.31 |
| 83 | 15.84 | 33.49 | 5.62 | 331 | 100 | 14.33 | 33.45 | 5.48 | 24.94 | 302 | 0.39 |
| 108 | 14.08 | 33.42 | 5.39 | 299 | 150 | 10.47 | 33.41 | 4.54 | 25.65 | 235 | 0.52 |
| 132 | - | 33.36 | 4.81 | | 200 | 9.37 | 33.87 | 3.38 | 26.20 | 183 | 0.63 |
| 159 | 10.12 | 33.49 | 4.37 | 223 | 250 | 8.37 | 34.01 | 2.64 | 26.46 | 158 | 0.72 |
| 213 | 9.12 | 33.95 | 3.12 | 173 | 300 | 8.21 | 34.18 | 1.33 | 26.62 | 143 | 0.79 |
| 272 | 8.15 | 34.05 | 2.27 | 152 | 400 | 7.40 | 34.26 | 0.78 | 26.80 | 126 | 0.93 |
| 320 | 8.24 | 34.23 | 1.06 | 139 | 500 | 6.50 | 34.34 | 0.41 | 26.99 | 108 | 1.06 |
| 431 | 7.04 | 34.27 | 0.67 | 120 | 600 | 5.84 | 34.35 | 0.28 | 27.08 | 99 | 1.17 |
| 540 | 6.23 | 34.36 | 0.30 | 103 | | | | | | | |
| 648 | 5.52 | 34.34 | 0.27 | 96 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

120.80 PAOLINA-T; October 14, 1952; 2328 GCT; 26°28.5'N, 117°47.5'W; sounding, 2140 fm; wind, 330°, force 2; weather, cloudy; sea, rough; wire angle, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.33 | 33.77 | 4.89 | 467 | 0 | 22.33 | 33.77 | 4.89 | 23.21 | 467 | 0.00 |
| 10 | 22.33 | 33.68 | 4.96 | 474 | 10 | 22.33 | 33.68 | 4.96 | 23.15 | 474 | 0.05 |
| 25 | 22.26 | 33.77 | 4.93 | 465 | 20 | 22.29 | 33.76 | 4.93 | 23.22 | 467 | 0.09 |
| 50 | 19.59 | 33.60 | 5.60 | 409 | 30 | 22.24 | 33.77 | 4.97 | 23.24 | 465 | 0.14 |
| 74 | 16.59 | 33.46 | 5.79 | 349 | 50 | 19.59 | 33.60 | 5.60 | 23.82 | 409 | 0.23 |
| 99 | 15.20 | 33.48 | 5.65 | 318 | 75 | 16.55 | 33.46 | 5.78 | 24.46 | 348 | 0.32 |
| 147 | 11.49 | 33.60 | 4.16 | 238 | 100 | 15.08 | 33.48 | 5.63 | 24.80 | 315 | 0.41 |
| 199 | 9.80 | 33.87 | 3.17 | 190 | 150 | 11.31 | 33.61 | 4.07 | 25.66 | 234 | 0.55 |
| 246 | 9.04 | 34.07 | 2.55 | 163 | 200 | 9.77 | 33.88 | 3.16 | 26.14 | 189 | 0.65 |
| 293 | 8.86 | 34.23 | 1.46 | 149 | 250 | 9.03 | 34.09 | 2.41 | 26.42 | 162 | 0.74 |
| 393 | 7.69 | 34.31 | 0.70 | 126 | 300 | 8.78 | 34.24 | 1.39 | 26.58 | 147 | 0.82 |
| 487 | 6.55 | 34.25 | 0.51 | 115 | 400 | 7.58 | 34.31 | 0.69 | 26.81 | 124 | 0.96 |
| 588 | 5.85 | 34.34 | 0.33 | 100 | 500 | 6.44 | 34.26 | 0.49 | 26.93 | 113 | 1.09 |
| 784 | 4.97 | 34.42 | 0.37 | 84 | 600 | 5.77 | 34.35 | 0.33 | 27.09 | 98 | 1.20 |
| 978 | 4.13 | 34.49 | 0.61 | 70 | 700 | 5.30 | 34.39 | 0.35 | 27.18 | 90 | 1.30 |
| 1180 | 3.58 | 34.52 | 0.83 | 62 | 800 | 4.90 | 34.43 | 0.39 | 27.26 | 82 | 1.40 |
| | | | | | 1000 | 4.06 | 34.49 | 0.64 | 27.40 | 69 | 1.57 |

120.90 PAOLINA-T; October 15, 1952; 0606 GCT; 26°08'N, 118°26'W; sounding, 2500 fm; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.82 | 33.60 | 5.23 | 466 | 0 | 21.82 | 33.60 | 5.23 | 23.23 | 466 | 0.00 |
| 10 | 21.84 | 33.60 | 4.96 | 466 | 10 | 21.84 | 33.60 | 4.96 | 23.22 | 466 | 0.05 |
| 20 | 21.81 | 33.60 | 5.12 | 465 | 20 | 21.81 | 33.60 | 5.12 | 23.23 | 465 | 0.09 |
| 35 | 21.84 | 33.60 | 5.03 | 466 | 30 | 21.83 | 33.60 | 5.05 | 23.22 | 466 | 0.14 |
| 49 | 20.01 | 33.69 | 5.64 | 413 | 50 | 19.90 | 33.69 | 5.69 | 23.81 | 410 | 0.23 |
| 63 | 17.52 | 33.57 | 5.84 | 362 | 75 | 16.70 | 33.71 | 5.85 | 24.62 | 333 | 0.32 |
| 78 | 16.56 | 33.71 | 5.86 | 330 | 100 | 15.72 | 33.73 | 5.63 | 24.85 | 311 | 0.40 |
| 98 | 15.86 | 33.73 | 5.68 | 314 | 150 | 11.27 | 33.82 | 4.08 | 25.83 | 218 | 0.54 |
| 123 | 12.86 | 33.73 | 5.23 | 253 | 200 | 9.96 | 34.03 | 3.26 | 26.22 | 180 | 0.64 |
| 152 | 11.16 | - | 4.01 | | 250 | 9.47 | 34.26 | 2.18 | 26.48 | 156 | 0.72 |
| 204 | 9.90 | 34.05 | 3.18 | 178 | 300 | 8.78 | 34.34 | 1.33 | 26.66 | 139 | 0.80 |
| 255 | 9.41 | 34.27 | 2.07 | 154 | 400 | 7.63 | 34.34 | 0.59 | 26.83 | 123 | 0.94 |
| 307 | 8.68 | 34.34 | 1.26 | 138 | 500 | 6.67 | 34.42 | 0.55 | 27.03 | 104 | 1.06 |
| 409 | 7.54 | 34.34 | 0.58 | 121 | 600 | 5.96 | 34.39 | 0.33 | 27.10 | 97 | 1.17 |
| 509 | 6.60 | 34.42 | 0.54 | 103 | | | | | | | |
| 615 | 5.86 | 34.38 | 0.30 | 97 | | | | | | | |

123.37 PAOLINA-T; October 16, 1952; 1455 GCT; 27°24'N, 114°39.5'W; sounding, 40 fm; wind, 320°, force 1; weather, overcast; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.92 | 33.79 | 5.09 | 455 | 0 | 21.92 | 33.79 | 5.09 | 23.34 | 455 | 0.00 |
| 10 | 20.56 | 33.68 | 4.83 | 427 | 10 | 20.56 | 33.68 | 4.83 | 23.63 | 427 | 0.04 |
| 20 | 18.35 | 33.57 | 5.29 | 381 | 20 | 18.35 | 33.57 | 5.29 | 24.11 | 381 | 0.08 |
| 30 | 16.32 | 33.52 | 5.18 | 339 | 30 | 16.32 | 33.52 | 5.18 | 24.56 | 339 | 0.12 |
| 51 | 15.33 | 33.53 | 4.56 | 317 | 50 | 15.36 | 33.53 | 4.57 | 24.78 | 318 | 0.19 |

123.40 PAOLINA-T; October 16, 1952; 1141 GCT; 27°16'N, 114°56.5'W; sounding, 540 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.57 | 33.82 | 5.18 | 443 | 0 | 21.57 | 33.82 | 5.18 | 23.46 | 443 | 0.00 |
| 11 | 21.36 | 33.78 | 5.11 | 441 | 10 | 21.39 | 33.78 | 5.12 | 23.48 | 441 | 0.04 |
| 20 | 16.30 | 33.31 | 5.98 | 354 | 20 | 16.30 | 33.31 | 5.98 | 24.40 | 354 | 0.08 |
| 36 | 14.58 | 33.32 | 5.79 | 317 | 30 | 14.94 | 33.33 | 5.94 | 24.72 | 323 | 0.12 |
| 50 | 13.97 | 33.57 | 4.48 | 286 | 50 | 13.97 | 33.57 | 4.48 | 25.11 | 286 | 0.18 |
| 65 | 12.36 | 33.49 | 4.25 | 262 | 75 | 11.90 | 33.58 | 3.93 | 25.53 | 247 | 0.25 |
| 81 | 11.79 | 33.68 | 3.67 | 237 | 100 | 11.63 | 33.85 | 2.92 | 25.79 | 222 | 0.31 |
| 102 | 11.62 | 33.86 | 2.88 | 221 | 150 | 10.23 | 34.05 | 2.35 | 26.19 | 183 | 0.41 |
| 127 | 10.74 | 33.91 | 2.75 | 202 | 200 | 9.79 | 34.23 | 1.76 | 26.41 | 163 | 0.50 |
| 157 | 10.06 | 34.11 | 2.27 | 176 | 250 | 9.60 | 34.45 | 0.85 | 26.61 | 144 | 0.58 |
| 205 | 9.78 | 34.25 | 1.68 | 161 | 300 | 9.02 | 34.42 | 0.65 | 26.68 | 137 | 0.65 |
| 252 | 9.56 | 34.45 | 0.81 | 143 | 400 | 7.79 | 34.42 | 0.45 | 26.87 | 119 | 0.78 |
| 300 | 9.02 | 34.42 | 0.65 | 137 | 500 | 6.59 | 34.34 | 0.32 | 26.98 | 109 | 0.90 |
| 402 | 7.76 | 34.42 | 0.45 | 119 | 600 | 5.90 | | 0.22 | | | |
| 501 | 6.59 | 34.34 | 0.31 | 109 | | | | | | | |
| 606 | 5.88 | - | 0.21 | | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

PAOLINA-T; October 16, 1952; 0429 GCT; 26°54'N, 115°37'W; sounding, 1970 fm; wind, 320°, force 2; weather, cloudy; sea, rough; wire angle, 15°. 123.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.04 | 33.58 | 5.32 | 447 | 0 | 21.04 | 33.58 | 5.32 | 23.42 | 447 | 0.00 |
| 10 | 21.04 | 33.58 | 5.16 | 447 | 10 | 21.04 | 33.58 | 5.16 | 23.42 | 447 | 0.04 |
| 19 | 20.95 | 33.57 | 5.21 | 445 | 20 | 20.94 | 33.57 | 5.22 | 23.44 | 445 | 0.09 |
| 34 | 20.24 | 33.57 | 5.43 | 427 | 30 | 20.53 | 33.57 | 5.32 | 23.55 | 435 | 0.13 |
| 48 | 15.23 | 33.35 | 6.18 | 328 | 50 | 14.84 | 33.35 | 6.17 | 24.76 | 320 | 0.21 |
| 63 | 13.61 | 33.35 | 5.60 | 295 | 75 | 12.75 | 33.46 | 4.95 | 25.27 | 271 | 0.28 |
| 77 | 12.69 | 33.48 | 4.83 | 268 | 100 | 11.03 | 33.54 | 3.70 | 25.65 | 234 | 0.35 |
| 95 | 11.30 | 33.53 | 4.05 | 240 | 150 | 10.02 | 34.02 | 2.45 | 26.20 | 182 | 0.45 |
| 118 | 10.51 | 33.78 | 2.87 | 208 | 200 | 9.40 | 34.24 | 1.93 | 26.48 | 156 | 0.54 |
| 144 | 10.06 | 33.98 | 2.55 | 186 | 250 | 8.26 | 34.17 | 2.00 | 26.60 | 144 | 0.62 |
| 188 | 9.81 | 34.25 | 1.88 | 162 | 300 | 8.08 | 34.34 | 1.05 | 26.76 | 129 | 0.69 |
| 234 | 8.37 | 34.16 | 2.21 | 147 | 400 | 7.87 | 34.42 | 0.38 | 26.86 | 120 | 0.82 |
| 278 | 8.13 | 34.27 | 1.35 | 135 | 500 | 6.48 | 34.38 | 0.33 | 27.02 | 105 | 0.94 |
| 376 | 8.03 | 34.43 | 0.38 | 122 | | | | | | | |
| 470 | 6.66 | 34.36 | 0.36 | 108 | | | | | | | |
| 566 | 6.21 | 34.43 | 0.24 | 97 | | | | | | | |

PAOLINA-T; October 16, 1952; 2145 GCT; 26°55'N, 114°06'W; sounding, 46 fm; wind, 320°, force 1; weather, cloudy; sea, moderate; wire angle, 02°. 127.34

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.56 | 33.78 | 4.96 | 500 | 0 | 23.56 | 33.78 | 4.96 | 22.87 | 500 | 0.00 |
| 11 | 23.06 | 33.80 | 5.04 | 485 | 10 | 23.07 | 33.80 | 5.02 | 23.03 | 485 | 0.05 |
| 21 | 22.24 | 33.69 | 5.14 | 470 | 20 | 22.26 | 33.69 | 5.13 | 23.17 | 471 | 0.10 |
| 31 | 17.78 | 33.51 | 5.90 | 372 | 30 | 17.80 | 33.51 | 5.89 | 24.20 | 373 | 0.14 |
| 51 | 15.22 | 33.53 | 5.16 | 315 | 50 | 15.30 | 33.53 | 5.16 | 24.79 | 316 | 0.21 |

PAOLINA-T; October 17, 1952; 0129 GCT; 26°43.5'N, 114°29.5'W; sounding, 1650 fm; wind, 270°, force 1; weather, cloudy; sea, rough; wire angle, 02°. 127.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.99 | 33.93 | 5.31 | 501 | 0 | 23.99 | 33.93 | 5.31 | 22.86 | 501 | 0.00 |
| 10 | 23.94 | 33.91 | 5.29 | 501 | 10 | 23.94 | 33.91 | 5.29 | 22.86 | 501 | 0.05 |
| 20 | 23.76 | 33.93 | 5.14 | 495 | 20 | 23.76 | 33.93 | 5.14 | 22.92 | 495 | 0.10 |
| 35 | 16.30 | 33.49 | 6.36 | 341 | 30 | 21.00 | 33.50 | 6.20 | 23.37 | 452 | 0.15 |
| 50 | 13.55 | 33.53 | 5.03 | 281 | 50 | 13.55 | 33.53 | 5.03 | 25.16 | 281 | 0.22 |
| 65 | 12.83 | 33.64 | 3.99 | 259 | 75 | 12.55 | 33.76 | 2.92 | 25.54 | 245 | 0.29 |
| 80 | 12.36 | 33.82 | 2.73 | 237 | 100 | 11.74 | 33.96 | 2.70 | 25.85 | 216 | 0.35 |
| 100 | 11.74 | 33.96 | 2.70 | 216 | 150 | 11.49 | 34.31 | 1.20 | 26.17 | 186 | 0.45 |
| 125 | 11.79 | 34.29 | 1.31 | 192 | 200 | 10.18 | 34.31 | 1.48 | 26.40 | 163 | 0.54 |
| 154 | 11.30 | 34.31 | 1.24 | 182 | 250 | 9.75 | 34.39 | 0.90 | 26.54 | 150 | 0.62 |
| 204 | 10.11 | 34.31 | 1.47 | 162 | 300 | 9.45 | 34.45 | 0.38 | 26.63 | 141 | 0.69 |
| 254 | 9.72 | 34.40 | 0.83 | 149 | 400 | 7.79 | 34.38 | 0.42 | 26.84 | 122 | 0.83 |
| 302 | 9.42 | 34.45 | 0.36 | 141 | 500 | 6.94 | 34.43 | 0.20 | 27.00 | 107 | 0.95 |
| 406 | 7.74 | 34.38 | 0.41 | 121 | 600 | 6.17 | 34.47 | 0.22 | 27.13 | 94 | 1.06 |
| 506 | 6.90 | 34.43 | 0.20 | 106 | | | | | | | |
| 613 | 6.06 | 34.47 | 0.22 | 93 | | | | | | | |

PAOLINA-T; October 17, 1952; 0744 GCT; 26°18.5'N, 115°10'W; sounding, 2200 fm; wind, calm; weather, cloudy; sea, calm; wire angle, 00°. 127.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.26 | 33.64 | 5.36 | 448 | 0 | 21.26 | 33.64 | 5.36 | 23.41 | 448 | 0.00 |
| 10 | 21.04 | 33.60 | 5.32 | 445 | 10 | 21.04 | 33.60 | 5.32 | 23.44 | 445 | 0.04 |
| 20 | 19.62 | 33.49 | 5.50 | 418 | 20 | 19.62 | 33.49 | 5.50 | 23.73 | 418 | 0.09 |
| 35 | 16.69 | 33.28 | 6.05 | 364 | 30 | 17.23 | 33.30 | 5.98 | 24.18 | 375 | 0.13 |
| 50 | 14.58 | 33.28 | 5.95 | 320 | 50 | 14.58 | 33.28 | 5.95 | 24.76 | 320 | 0.20 |
| 65 | 13.71 | 33.49 | 5.01 | 287 | 75 | 13.10 | 33.63 | 4.13 | 25.33 | 265 | 0.27 |
| 80 | 12.64 | 33.64 | 4.01 | 256 | 100 | 10.57 | 33.64 | 3.72 | 25.81 | 219 | 0.33 |
| 100 | 10.57 | 33.64 | 3.72 | 219 | 150 | 9.93 | 34.05 | 2.44 | 26.24 | 179 | 0.43 |
| 124 | 10.35 | 33.82 | 2.99 | 202 | 200 | 10.08 | 34.32 | 0.97 | 26.43 | 161 | 0.52 |
| 154 | 9.90 | 34.09 | 2.31 | 175 | 250 | 9.66 | 34.51 | 0.64 | 26.65 | 140 | 0.60 |
| 202 | 10.07 | 34.34 | 0.94 | 159 | 300 | 9.20 | 34.52 | 0.31 | 26.73 | 132 | 0.67 |
| 252 | 9.67 | 34.51 | 0.63 | 140 | 400 | 7.76 | 34.53 | 0.26 | 26.96 | 110 | 0.80 |
| 300 | 9.20 | 34.52 | 0.31 | 132 | 500 | 6.77 | 34.44 | 0.26 | 27.03 | 104 | 0.91 |
| 402 | 7.73 | 34.53 | 0.26 | 110 | 600 | 6.03 | 34.43 | 0.23 | 27.12 | 95 | 1.02 |
| 501 | 6.76 | 34.44 | 0.26 | 104 | | | | | | | |
| 604 | 6.00 | 34.43 | 0.23 | 95 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_\Gamma$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

127.50 PAOLINA-T; October 17, 1952; 0902 GCT;[a] 26°18.5'N, 115°10'W; sounding, 2200 fm; wind, calm; weather, cloudy; sea, calm; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.31 | | | | | | | | | | |
| 7 | 21.32 | | | | | | | | | | |
| 17 | 20.93 | | | | | | | | | | |
| 27 | 19.48 | | | | | | | | | | |
| 37 | 16.60 | | | | | | | | | | |
| 47 | 14.89 | | | | | | | | | | |
| 52 | 14.60 | | | | | | | | | | |
| 57 | 13.99 | | | | | | | | | | |

130.30 PAOLINA-T; October 18, 1952; 1244 GCT; 26°29.5'N, 113°28'W; sounding, 41 fm; wind, 350°, force 2; weather, clear; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.54 | 33.86 | 4.98 | 494 | 0 | 23.54 | 33.86 | 4.98 | 22.94 | 494 | 0.00 |
| 10 | 23.55 | 33.87 | 5.03 | 493 | 10 | 23.55 | 33.87 | 5.03 | 22.94 | 493 | 0.05 |
| 20 | 22.22 | 33.78 | 5.09 | 463 | 20 | 22.22 | 33.78 | 5.09 | 23.25 | 463 | 0.10 |
| 30 | 18.67 | 33.57 | 5.65 | 389 | 30 | 18.67 | 33.57 | 5.65 | 24.03 | 389 | 0.14 |
| 51 | 16.11 | 33.49 | 5.45 | 336 | 50 | 16.28 | 33.49 | 5.48 | 24.54 | 340 | 0.21 |

130.35 PAOLINA-T; October 18, 1952; 0932 GCT; 26°18.5'N, 113°43'W; sounding, 70 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.19 | 34.07 | 4.96 | 497 | 0 | 24.19 | 34.07 | 4.96 | 22.90 | 497 | 0.00 |
| 10 | 24.18 | 34.11 | 4.81 | 493 | 10 | 24.18 | 34.11 | 4.81 | 22.94 | 493 | 0.05 |
| 20 | 24.21 | 34.09 | 4.78 | 496 | 20 | 24.21 | 34.09 | 4.78 | 22.91 | 496 | 0.10 |
| 30 | 18.60 | 33.43 | 5.59 | 397 | 30 | 18.60 | 33.43 | 5.59 | 23.94 | 397 | 0.14 |
| 50 | 15.90 | 33.51 | 5.65 | 330 | 50 | 15.90 | 33.51 | 5.65 | 24.65 | 330 | 0.22 |
| 74 | 13.72 | 33.80 | 3.90 | 264 | 75 | (13.68) | (33.81) | (3.87) | (25.35) | (263) | (0.29) |

130.40 PAOLINA-T; October 18, 1952; 0543 GCT; 26°09'N, 114°05'W; sounding, 1150 fm; wind, 360°, force 2; weather, clear; sea, rough; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.47 | 34.05 | 4.85 | 506 | 0 | 24.47 | 34.05 | 4.85 | 22.81 | 506 | 0.00 |
| 9 | 24.46 | 34.09 | 4.99 | 503 | 10 | 24.47 | 34.09 | 5.00 | 22.84 | 503 | 0.05 |
| 24 | 21.38 | 33.64 | 5.33 | 451 | 20 | 24.44 | 34.08 | 5.00 | 22.84 | 503 | 0.10 |
| 48 | 14.65 | 33.28 | 6.25 | 321 | 30 | 18.60 | 33.46 | 5.51 | 23.97 | 395 | 0.15 |
| 72 | 13.04 | 33.57 | 4.31 | 268 | 50 | 14.35 | 33.29 | 6.23 | 24.81 | 314 | 0.22 |
| 96 | 11.60 | 33.75 | 3.24 | 229 | 75 | 12.97 | 33.58 | 4.25 | 25.32 | 266 | 0.29 |
| 149 | 10.82 | 34.23 | 1.75 | 180 | 100 | 11.45 | 33.77 | 3.05 | 25.76 | 225 | 0.35 |
| 196 | 10.54 | 34.47 | 0.86 | 157 | 150 | 10.81 | 34.24 | 1.73 | 26.24 | 179 | 0.45 |
| 243 | 9.57 | 34.43 | 1.03 | 145 | 200 | 10.48 | 34.47 | 0.87 | 26.48 | 156 | 0.54 |
| 290 | 9.68 | 34.53 | 0.41 | 139 | 250 | 9.58 | 34.44 | 1.01 | 26.61 | 144 | 0.62 |
| 390 | 8.00 | 34.49 | 0.32 | 117 | 300 | 9.63 | 34.53 | 0.40 | 26.67 | 138 | 0.69 |
| 486 | 6.75 | 34.40 | 0.27 | 107 | 400 | 7.84 | 34.48 | 0.32 | 26.91 | 115 | 0.82 |
| 587 | 5.88 | 34.43 | 0.27 | 93 | 500 | 6.60 | 34.40 | 0.27 | 27.02 | 105 | 0.94 |
| 785 | 4.82 | 34.49 | 0.34 | 77 | 600 | 5.78 | 34.43 | 0.27 | 27.15 | 92 | 1.05 |
| 984 | 4.04 | 34.52 | 0.60 | 67 | 700 | 5.23 | 34.47 | 0.30 | 27.25 | 83 | 1.14 |
| 1186 | 3.56 | 34.57 | 0.81 | 58 | 800 | 4.75 | 34.49 | 0.37 | 27.32 | 76 | 1.23 |
| | | | | | 1000 | 3.98 | 34.53 | 0.61 | 27.44 | 65 | 1.39 |

a) Bathythermograph calibration cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

PAOLINA-T; October 17, 1952; 2325 GCT; 25°49'N, 114°46'W; sounding, 2060 fm; wind, 320°, force 1; weather, clear; sea, slight; wire angle, 05°. 130.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.94 | 33.71 | 5.15 | 461 | 0 | 21.94 | 33.71 | 5.15 | 23.28 | 461 | 0.00 |
| 10 | 21.45 | 33.69 | 5.23 | 450 | 10 | 21.45 | 33.69 | 5.23 | 23.40 | 450 | 0.05 |
| 20 | 21.25 | 33.71 | 5.27 | 443 | 20 | 21.25 | 33.71 | 5.27 | 23.47 | 443 | 0.09 |
| 35 | 17.26 | 33.34 | 6.00 | 373 | 30 | 19.60 | 33.44 | 5.90 | 23.70 | 421 | 0.13 |
| 50 | 14.57 | 33.31 | 5.94 | 317 | 50 | 14.57 | 33.31 | 5.94 | 24.78 | 317 | 0.21 |
| 65 | 12.94 | 33.35 | 5.71 | 283 | 75 | 11.90 | 33.43 | 4.70 | 25.41 | 258 | 0.28 |
| 80 | 11.61 | 33.46 | 4.31 | 250 | 100 | 10.98 | 33.75 | 3.29 | 25.83 | 218 | 0.34 |
| 99 | 11.00 | 33.75 | 3.31 | 218 | 150 | 9.75 | 34.11 | 2.27 | 26.32 | 171 | 0.44 |
| 123 | 10.29 | 33.95 | 2.71 | 192 | 200 | 9.65 | 34.46 | 1.36 | 26.61 | 144 | 0.52 |
| 152 | 9.72 | 34.13 | 2.22 | 169 | 250 | 9.58 | 34.47 | 0.54 | 26.63 | 142 | 0.59 |
| 189p | 9.64 | 34.45 | 1.65 | 144 | 300 | 8.69 | 34.47 | 0.39 | 26.77 | 128 | 0.66 |
| 237p | 9.70 | 34.47 | 0.63 | 144 | 400 | 7.41 | 34.46 | 0.33 | 26.96 | 111 | 0.79 |
| 284p | 8.94 | 34.47 | 0.41 | 132 | 500 | 6.42 | 34.42 | 0.29 | 27.06 | 101 | 0.90 |
| 398 | 7.44 | 34.46 | 0.34 | 111 | 600 | (5.66) | (34.42) | (0.22) | (27.16) | (92) | (1.00) |
| 495 | 6.48 | 34.42 | 0.31 | 102 | | | | | | | |
| 599 | 5.68 | 34.42 | 0.23 | 92 | | | | | | | |

PAOLINA-T; October 17, 1952; 1653 GCT; 25°19.5'N, 115°26.5'W; sounding, 2200 fm; wind, 270°, force 1; weather, partly cloudy; sea, slight; wire angle, 07°. 130.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.75 | 33.57 | 4.91 | 466 | 0 | 21.75 | 33.57 | 4.91 | 23.22 | 466 | 0.00 |
| 11 | 21.74 | 33.55 | 4.97 | 467 | 10 | 21.74 | 33.55 | 4.96 | 23.21 | 467 | 0.05 |
| 25 | 21.70 | 33.58 | 5.03 | 464 | 20 | 21.72 | 33.57 | 5.00 | 23.23 | 465 | 0.09 |
| 51 | 19.09 | - | 5.64 | | 30 | 21.69 | 33.58 | 5.09 | 23.25 | 464 | 0.14 |
| 75 | 16.44 | 33.75 | 5.50 | 325 | 50 | 19.25 | 33.68 | 5.64 | 23.97 | 395 | 0.23 |
| 99 | 13.62 | 33.64 | 4.38 | 274 | 75 | 16.44 | 33.75 | 5.50 | 24.71 | 325 | 0.32 |
| 152 | 10.96 | 34.05 | - | 196 | 100 | 13.59 | 33.64 | 4.33 | 25.24 | 274 | 0.39 |
| 199 | 10.01 | 34.27 | 1.78 | 164 | 150 | 11.02 | 34.04 | | 26.04 | 197 | 0.51 |
| 246 | 9.33 | 34.34 | 1.34 | 148 | 200 | 10.00 | 34.27 | 1.76 | 26.40 | 163 | 0.60 |
| 294 | 9.24 | 34.45 | 0.71 | 138 | 250 | 9.33 | 34.35 | 1.28 | 26.58 | 147 | 0.68 |
| 394 | 7.97 | 34.45 | 0.34 | 119 | 300 | 9.23 | 34.45 | 0.68 | 26.67 | 138 | 0.76 |
| 489 | 6.98 | 34.42 | 0.25 | 108 | 400 | 7.88 | 34.45 | 0.34 | 26.88 | 118 | 0.89 |
| 588 | 6.26 | 34.40 | 0.23 | 100 | 500 | 6.88 | 34.42 | 0.25 | 27.00 | 107 | 1.01 |
| 784 | 5.04 | 34.43 | 0.34 | 84 | 600 | 6.18 | 34.40 | 0.23 | 27.08 | 99 | 1.12 |
| 978 | 4.26 | 34.52 | 0.50 | 69 | 700 | 5.54 | 34.41 | 0.30 | 27.17 | 91 | 1.23 |
| 1178 | 3.70 | - | - | | 800 | 4.96 | 34.43 | 0.36 | 27.25 | 83 | 1.32 |
| | | | | | 1000 | 4.18 | (34.53) | (0.51) | (27.42) | (67) | (1.49) |

PAOLINA-T; October 18, 1952; 1822 GCT; 26°04.5'N, 112°48'W; sounding, 55 fm; wind, 330°, force 4; weather, clear; sea, rough; wire angle, 05°. 133.25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.81 | 33.82 | 4.81 | 504 | 0 | 23.81 | 33.82 | 4.81 | 22.83 | 504 | 0.00 |
| 10 | 23.80 | 33.82 | 4.92 | 504 | 10 | 23.80 | 33.82 | 4.92 | 22.83 | 504 | 0.05 |
| 20 | 17.25 | 33.62 | 5.04 | 352 | 20 | 17.25 | 33.62 | 5.04 | 24.42 | 352 | 0.09 |
| 30 | 15.81 | 33.58 | 5.22 | 323 | 30 | 15.81 | 33.58 | 5.22 | 24.72 | 323 | 0.13 |
| 50 | 13.58 | 33.68 | 4.01 | 271 | 50 | 13.58 | 33.68 | 4.01 | 25.27 | 271 | 0.19 |

PAOLINA-T; October 18, 1952; 2046 GCT; 25°55'N, 113°07.5'W; sounding, 100 fm; wind, 360°, force 3; weather, clear; sea, rough; wire angle, 02°. 133.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.82 | 33.85 | 5.00 | 502 | 0 | 23.82 | 33.85 | 5.00 | 22.85 | 502 | 0.00 |
| 10 | 23.78 | 33.84 | 5.03 | 502 | 10 | 23.78 | 33.84 | 5.03 | 22.85 | 502 | 0.05 |
| 20 | 18.27 | 33.55 | 5.60 | 381 | 20 | 18.27 | 33.55 | 5.60 | 24.12 | 381 | 0.09 |
| 30 | 16.41 | 33.57 | 5.34 | 337 | 30 | 16.41 | 33.57 | 5.34 | 24.58 | 337 | 0.13 |
| 50 | 14.60 | 33.53 | 5.09 | 302 | 50 | 14.60 | 33.53 | 5.09 | 24.95 | 302 | 0.19 |
| 75 | 12.98 | 33.71 | 3.80 | 257 | 75 | 12.98 | 33.71 | 3.80 | 25.42 | 257 | 0.26 |
| 100 | 12.66 | 33.96 | 2.57 | 233 | 100 | 12.66 | 33.96 | 2.57 | 25.67 | 233 | 0.33 |

PAOLINA-T; October 19, 1952; 0610 GCT; 25°34'N, 112°18.5'W; sounding, 45 fm; wind, 300°, force 2; weather, clear; sea, rough; wire angle, 00°. 137.23

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.72 | 33.93 | 4.79 | 522 | 0 | 24.72 | 33.93 | 4.79 | 22.64 | 522 | 0.00 |
| 10 | 24.74 | 33.95 | 4.78 | 521 | 10 | 24.74 | 33.95 | 4.78 | 22.65 | 521 | 0.05 |
| 20 | 23.04 | 33.95 | 5.08 | 473 | 20 | 23.04 | 33.95 | 5.08 | 23.15 | 473 | 0.10 |
| 30 | 19.61 | 33.73 | 5.54 | 400 | 30 | 19.61 | 33.73 | 5.54 | 23.92 | 400 | 0.15 |
| 50 | 15.78 | 33.48 | 5.75 | 330 | 50 | 15.78 | 33.48 | 5.75 | 24.65 | 330 | 0.22 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

137.30 PAOLINA-T; October 19, 1952; 0201 GCT; 25°20.5'N, 112°44.5'W; sounding, 140 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.10 | 33.86 | 5.14 | 509 | 0 | 24.10 | 33.86 | 5.14 | 22.77 | 509 | 0.00 |
| 10 | 24.09 | 33.86 | 4.86 | 509 | 10 | 24.09 | 33.86 | 4.86 | 22.77 | 509 | 0.05 |
| 20 | 23.98 | 33.89 | 4.88 | 504 | 20 | 23.98 | 33.89 | 4.88 | 22.83 | 504 | 0.10 |
| 29 | 21.07 | 33.89 | 5.47 | 425 | 30 | 21.00 | 33.89 | 5.47 | 23.67 | 423 | 0.15 |
| 49 | 17.24 | 33.78 | 5.50 | 340 | 50 | 17.10 | 33.74 | 5.50 | 24.54 | 340 | 0.22 |
| 73 | 14.48 | 33.46 | 5.44 | 305 | 75 | 14.40 | 33.46 | 5.42 | 24.93 | 303 | 0.31 |
| 98 | 12.82 | 33.69 | 3.71 | 255 | 100 | 12.84 | 33.70 | 3.40 | 25.44 | 255 | 0.38 |
| 124 | 12.90 | 34.38 | 0.67 | 206 | | | | | | | |

60.55 BLACK DOUGLAS; November 20, 1952; 1005 GCT; 37°47.5'N, 123°15'W; sounding, 60 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.32 | 33.07 | 5.47 | 292 | 0 | 12.32 | 33.07 | 5.47 | 25.05 | 292 | 0.00 |
| 10 | 12.32 | 33.06 | 5.31 | 292 | 10 | 12.32 | 33.06 | 5.31 | 25.04 | 292 | 0.03 |
| 20 | 12.28 | 33.11 | 4.88 | 288 | 20 | 12.28 | 33.11 | 4.88 | 25.09 | 288 | 0.06 |
| 30 | 11.37 | 33.31 | 4.16 | 257 | 30 | 11.37 | 33.31 | 4.16 | 25.41 | 257 | 0.09 |
| 50 | 10.54 | 33.46 | 3.36 | 232 | 50 | 10.54 | 33.46 | 3.36 | 25.68 | 232 | 0.13 |

60.60 BLACK DOUGLAS; November 20, 1952; 1335 GCT; 37°37'N, 123°37'W; sounding, 1850 fm; wind, 340°, force 3; weather, clear; sea, rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.75 | 33.07 | 4.67 | 319 | 0 | 13.75 | 33.07 | 4.67 | 24.77 | 319 | 0.00 |
| 10 | 13.74 | 33.08 | 4.66 | 318 | 10 | 13.74 | 33.08 | 4.66 | 24.78 | 318 | 0.03 |
| 25 | 13.47 | 33.09 | 4.60 | 312 | 20 | 13.72 | 33.08 | 4.62 | 24.78 | 317 | 0.06 |
| 49 | 10.33 | 33.29 | 3.62 | 241 | 30 | 13.10 | 33.11 | 4.51 | 24.93 | 303 | 0.09 |
| 74 | 8.85 | 33.39 | 3.47 | 211 | 50 | 10.12 | 33.29 | 3.60 | 25.62 | 238 | 0.15 |
| 98 | 8.70 | 33.61 | 2.80 | 192 | 75 | 8.82 | 33.40 | 3.46 | 25.92 | 210 | 0.21 |
| 151 | 8.66 | 33.90 | 2.02 | 170 | 100 | 8.70 | 33.63 | 2.75 | 26.11 | 191 | 0.26 |
| 198 | 8.46 | 33.97 | 1.62 | 162 | 150 | 8.67 | 33.89 | 2.03 | 26.32 | 171 | 0.35 |
| 245 | 7.96 | 34.10 | 1.45 | 145 | 200 | 8.44 | 33.98 | 1.61 | 26.43 | 161 | 0.43 |
| 292 | 7.50 | 34.11 | 1.22 | 138 | 250 | 7.90 | 34.10 | 1.42 | 26.60 | 144 | 0.51 |
| 389 | 6.88 | 34.18 | 0.77 | 125 | 300 | 7.44 | 34.12 | 1.19 | 26.69 | 136 | 0.58 |
| 481 | 6.32 | 34.23 | 0.51 | 114 | 400 | 6.82 | 34.19 | 0.72 | 26.83 | 123 | 0.72 |
| 578 | 5.18 | 34.19 | 0.48 | 103 | 500 | 6.07 | 34.22 | 0.51 | 26.95 | 111 | 0.84 |
| 770 | 4.30 | 34.31 | 0.22 | 85 | 600 | 5.03 | 34.19 | 0.43 | 27.05 | 102 | 0.95 |
| 965 | 3.78 | 34.44 | 0.28 | 70 | 700 | 4.57 | 34.26 | 0.31 | 27.16 | 92 | 1.06 |
| 1167 | 3.40 | 34.52 | 0.53 | 61 | 800 | 4.21 | 34.33 | 0.22 | 27.25 | 83 | 1.15 |
| | | | | | 1000 | 3.69 | 34.46 | 0.32 | 27.41 | 68 | 1.32 |

60.70 BLACK DOUGLAS; November 20, 1952; 1943 GCT; 37°17'N, 124°21'W; sounding, 2200 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.16 | 33.01 | 4.53 | 331 | 0 | 14.16 | 33.01 | 4.53 | 24.64 | 331 | 0.00 |
| 10 | 14.03 | 33.02 | 4.60 | 328 | 10 | 14.03 | 33.02 | 4.60 | 24.67 | 328 | 0.03 |
| 20 | 13.40 | 33.01 | 4.62 | 316 | 20 | 13.40 | 33.01 | 4.62 | 24.79 | 316 | 0.07 |
| 35 | 12.80 | 33.09 | 4.67 | 299 | 30 | 13.02 | 33.07 | 4.66 | 24.92 | 305 | 0.10 |
| 50 | 10.24 | 33.06 | 4.31 | 257 | 50 | 10.24 | 33.06 | 4.31 | 25.42 | 257 | 0.15 |
| 64 | 10.04 | 33.22 | 3.84 | 242 | 75 | 9.65 | 33.31 | 3.52 | 25.71 | 229 | 0.21 |
| 79 | 9.28 | 33.34 | 3.47 | 221 | 100 | 8.36 | 33.47 | 3.47 | 26.04 | 198 | 0.27 |
| 98 | 8.39 | 33.45 | 3.47 | 200 | 150 | 7.68 | 33.83 | 2.98 | 26.42 | 161 | 0.36 |
| 122 | 8.18 | 33.63 | 3.03 | 183 | 200 | 7.04 | 33.91 | 2.40 | 26.58 | 147 | 0.44 |
| 151 | 7.68 | 33.84 | 2.98 | 161 | 250 | 6.82 | 33.98 | 1.62 | 26.66 | 139 | 0.51 |
| 198 | 7.06 | 33.91 | 2.45 | 147 | 300 | 6.43 | 34.02 | 1.17 | 26.75 | 131 | 0.58 |
| 246 | 6.86 | 33.98 | 1.67 | 139 | 400 | 5.86 | 34.14 | 0.58 | 26.91 | 115 | 0.71 |
| 292 | 6.49 | 34.01 | 1.22 | 132 | 500 | 5.43 | 34.22 | 0.35 | 27.03 | 104 | 0.82 |
| 392 | 5.89 | 34.13 | 0.60 | 116 | 600 | (5.00) | (34.26) | (0.30) | (27.11) | (96) | (0.93) |
| 488 | 5.50 | 34.22 | 0.38 | 105 | | | | | | | |
| 592 | 5.02 | 34.26 | 0.30 | 96 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

BLACK DOUGLAS; November 21, 1952; 0250 GCT; 36°57'N, 125°04'W; sounding, 2400 fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 33°. 60.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.68 | 32.98 | 4.78 | 344 | 0 | 14.68 | 32.98 | 4.78 | 24.51 | 344 | 0.00 |
| 8 | 14.67 | 32.95 | 4.66 | 346 | 10 | 14.67 | 32.95 | 4.62 | 24.48 | 346 | 0.03 |
| 21 | 14.68 | 32.95 | 4.57 | 346 | 20 | 14.67 | 32.95 | 4.57 | 24.48 | 346 | 0.07 |
| 47 | 11.12 | 32.88 | 4.56 | 285 | 30 | 14.66 | 32.94 | 4.56 | 24.48 | 346 | 0.10 |
| 67 | 9.68 | 33.01 | 4.20 | 252 | 50 | 10.60 | 32.90 | 4.56 | 25.23 | 274 | 0.17 |
| 92 | 9.21 | 33.38 | 3.25 | 217 | 75 | 9.51 | 33.09 | 3.95 | 25.56 | 243 | 0.23 |
| 136 | 8.18 | 33.70 | 2.48 | 178 | 100 | 8.92 | 33.46 | 3.09 | 25.95 | 207 | 0.29 |
| 178 | 7.78 | 33.91 | 2.16 | 157 | 150 | 8.03 | 33.79 | 2.35 | 26.34 | 169 | 0.38 |

BLACK DOUGLAS; November 21, 1952; 0935 GCT; 36°37'N, 125°47'W; sounding, 2440 fm; wind, 340°, force 6; weather, rain; sea, very rough; wire angle, 24°. 60.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.57 | 32.92 | 4.51 | 346 | 0 | 14.57 | 32.92 | 4.51 | 24.48 | 346 | 0.00 |
| 9 | 14.56 | 32.97 | 4.58 | 342 | 10 | 14.57 | 32.97 | 4.57 | 24.52 | 342 | 0.03 |
| 18 | 14.56 | 32.91 | 4.53 | 346 | 20 | 14.56 | 32.91 | 4.54 | 24.48 | 346 | 0.07 |
| 32 | 14.56 | 32.92 | 4.57 | 346 | 30 | 14.56 | 32.92 | 4.56 | 24.49 | 346 | 0.10 |
| 50 | 10.35 | 33.07 | 3.75 | 258 | 50 | 10.35 | 33.07 | 3.75 | 25.41 | 258 | 0.16 |
| 64 | 9.49 | 33.21 | 4.02 | 234 | 75 | 9.10 | 33.29 | 3.50 | 25.79 | 222 | 0.22 |
| 78 | 9.02 | 33.31 | 3.36 | 219 | 100 | 8.46 | 33.53 | 2.79 | 26.07 | 195 | 0.28 |
| 100 | 8.46 | 33.53 | 2.79 | 195 | 150 | 7.69 | 33.86 | 2.36 | 26.45 | 159 | 0.37 |
| 122 | 8.21 | 33.67 | 2.53 | 181 | 200 | 7.22 | 33.95 | 2.09 | 26.58 | 146 | 0.44 |
| 148 | 7.71 | 33.86 | 2.38 | 160 | 250 | 6.78 | 34.01 | 1.53 | 26.69 | 136 | 0.52 |
| 195 | 7.26 | 33.94 | 2.13 | 147 | 300 | 6.28 | 34.03 | 1.05 | 26.77 | 128 | 0.58 |
| 245 | 6.82 | 34.01 | 1.60 | 137 | 400 | 5.31 | 34.05 | 0.85 | 26.91 | 115 | 0.71 |
| 286 | 6.43 | 34.03 | 1.14 | 130 | 500 | 4.82 | 34.16 | 0.51 | 27.05 | 102 | 0.82 |
| 384 | 5.41 | 34.03 | 0.92 | 118 | 600 | (4.52) | (34.24) | (0.32) | (27.15) | (93) | (0.93) |
| 485 | 4.87 | 34.15 | 0.55 | 103 | | | | | | | |
| 590 | 4.54 | 34.23 | 0.33 | 94 | | | | | | | |

BLACK DOUGLAS; November 21, 1952; 1537 GCT; 36°17'N, 126°30'W; sounding, 2460 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 03°. 60.100

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.28 | 32.97 | 4.58 | 336 | 0 | 14.28 | 32.97 | 4.58 | 24.58 | 336 | 0.00 |
| 10 | 14.27 | 32.96 | 4.64 | 337 | 10 | 14.27 | 32.96 | 4.64 | 24.58 | 337 | 0.03 |
| 25 | 14.28 | 32.96 | 4.53 | 337 | 20 | 14.27 | 32.96 | 4.59 | 24.58 | 337 | 0.07 |
| 50 | 13.26 | 33.03 | 4.51 | 312 | 30 | 14.28 | 32.96 | 4.52 | 24.57 | 337 | 0.10 |
| 74 | 9.56 | 33.18 | 3.71 | 237 | 50 | 13.26 | 33.03 | 4.51 | 24.84 | 312 | 0.17 |
| 108 | 8.38 | 33.50 | 2.93 | 196 | 75 | 9.50 | 33.19 | 3.70 | 25.64 | 235 | 0.24 |
| 152 | 7.90 | 33.79 | 2.40 | 167 | 100 | 8.50 | 33.43 | 3.08 | 25.99 | 203 | 0.29 |
| 199 | 7.47 | 33.95 | 2.08 | 150 | 150 | 7.92 | 33.78 | 2.43 | 26.35 | 168 | 0.38 |
| 247 | 7.20 | 34.04 | 1.57 | 139 | 200 | 7.46 | 33.95 | 2.05 | 26.55 | 149 | 0.46 |
| 294 | 6.52 | 34.07 | 1.22 | 128 | 250 | 7.12 | 34.04 | 1.54 | 26.67 | 138 | 0.54 |
| 392 | 5.79 | 34.14 | 0.69 | 114 | 300 | 6.49 | 34.08 | 1.20 | 26.78 | 127 | 0.61 |
| 485 | 5.04 | 34.19 | 0.54 | 102 | 400 | 5.72 | 34.15 | 0.69 | 26.94 | 113 | 0.73 |
| 581 | 4.60 | 34.19 | 0.38 | 97 | 500 | 4.98 | 34.19 | 0.51 | 27.06 | 101 | 0.84 |
| 674 | 4.51 | 34.29 | 0.28 | 89 | 600 | 4.59 | 34.21 | 0.33 | 27.12 | 96 | 0.95 |
| 777 | 4.17 | 34.33 | 0.24 | 82 | 700 | 4.43 | 34.30 | 0.26 | 27.21 | 87 | 1.05 |

BLACK DOUGLAS; November 21, 1952; 2113 GCT; 35°57'N, 127°12'W; sounding, 2580 fm; wind, 350°, force 3; weather, partly cloudy; sea, very rough; wire angle, 19°. 60.110

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.58 | 32.95 | 4.72 | 324 | 0 | 13.58 | 32.95 | 4.72 | 24.71 | 324 | 0.00 |
| 9 | 13.54 | 32.96 | 4.64 | 323 | 10 | 13.54 | 32.96 | 4.64 | 24.73 | 323 | 0.03 |
| 19 | 13.50 | 32.97 | 4.72 | 321 | 20 | 13.50 | 32.97 | 4.73 | 24.74 | 321 | 0.06 |
| 33 | 13.50 | 32.97 | 4.62 | 321 | 30 | 13.50 | 32.97 | 4.68 | 24.74 | 321 | 0.10 |
| 47 | 10.52 | 33.01 | 4.38 | 265 | 50 | 10.34 | 33.03 | 4.30 | 25.38 | 261 | 0.16 |
| 61 | 9.66 | 33.19 | 3.92 | 238 | 75 | 8.95 | 33.39 | 3.45 | 25.89 | 212 | 0.21 |
| 75 | 8.95 | 33.39 | 3.45 | 212 | 100 | 8.32 | 33.60 | 3.03 | 26.15 | 187 | 0.26 |
| 93 | 8.50 | 33.55 | 3.14 | 194 | 150 | 7.62 | 33.92 | 2.46 | 26.50 | 154 | 0.35 |
| 114 | 8.02 | 33.72 | 2.80 | 174 | 200 | 7.04 | 33.94 | 2.13 | 26.60 | 145 | 0.43 |
| 139 | 7.72 | 33.91 | 2.51 | 156 | 250 | 6.70 | 34.10 | 1.44 | 26.77 | 128 | 0.50 |
| 182 | 7.28 | 33.93 | 2.31 | 149 | 300 | 6.28 | 34.15 | 1.08 | 26.87 | 119 | 0.56 |
| 225 | 6.80 | 33.99 | 1.83 | 138 | 400 | 5.42 | 34.14 | 0.77 | 26.97 | 110 | 0.68 |
| 269 | 6.60 | 34.14 | 1.24 | 124 | 500 | 4.88 | 34.19 | 0.57 | 27.07 | 100 | 0.79 |
| 364 | 5.70 | 34.13 | 0.81 | 114 | | | | | | | |
| 458 | 5.06 | 34.16 | 0.69 | 104 | | | | | | | |
| 561 | 4.74 | 34.24 | 0.42 | 95 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **63.52** | BLACK DOUGLAS; November 20, 1952; 0226 GCT; 37°19'N, 122°36'W; sounding, 46 fm; wind, 340°, force 2; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 12.74 | 33.15 | 4.76 | 294 | 0 | 12.74 | 33.15 | 4.76 | 25.03 | 294 | 0.00 |
| 10 | 12.72 | 33.26 | 4.77 | 285 | 10 | 12.72 | 33.26 | 4.77 | 25.12 | 285 | 0.03 |
| 20 | 12.58 | 33.25 | 4.70 | 283 | 20 | 12.58 | 33.25 | 4.70 | 25.14 | 283 | 0.06 |
| 30 | 12.46 | 33.26 | 4.74 | 280 | 30 | 12.46 | 33.26 | 4.74 | 25.17 | 280 | 0.09 |
| 51 | 12.24 | 33.33 | 4.65 | 271 | 50 | 12.24 | 33.33 | 4.66 | 25.27 | 271 | 0.14 |
| 75 | 11.04 | 33.52 | 3.30 | 236 | 75 | 11.04 | 33.52 | 3.30 | 25.64 | 236 | 0.20 |
| **63.55** | BLACK DOUGLAS; November 20, 1952; 0433 GCT; 37°14'N, 122°49.5'W; sounding, 120 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 14.36 | 32.95 | 4.79 | 339 | 0 | 14.36 | 32.95 | 4.79 | 24.55 | 339 | 0.00 |
| 10 | 14.26 | 32.99 | 4.74 | 335 | 10 | 14.26 | 32.99 | 4.74 | 24.60 | 335 | 0.03 |
| 25 | 13.74 | 32.97 | 4.69 | 326 | 20 | 14.00 | 32.98 | 4.71 | 24.65 | 330 | 0.07 |
| 50 | 9.35 | 32.98 | 4.33 | 249 | 30 | 12.10 | 32.97 | 4.67 | 25.02 | 295 | 0.10 |
| 75 | 8.76 | 33.15 | 3.84 | 227 | 50 | 9.35 | 32.98 | 4.33 | 25.50 | 249 | 0.15 |
| 99 | 8.85 | 33.53 | 3.09 | 200 | 75 | 8.76 | 33.15 | 3.84 | 25.73 | 227 | 0.21 |
| 123 | 9.28 | 33.86 | 2.03 | 182 | 100 | 8.85 | 33.54 | 3.02 | 26.02 | 200 | 0.27 |
| 152 | 8.96 | 34.00 | 1.75 | 167 | 150 | 9.01 | 33.99 | 1.76 | 26.35 | 169 | 0.36 |
| **67.50** | BLACK DOUGLAS; November 19, 1952; 2116 GCT; 36°49'N, 122°04.5'W; sounding, 57 fm; wind, 340°, force 1; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 13.26 | 33.26 | 4.68 | 295 | 0 | 13.26 | 33.26 | 4.68 | 25.01 | 295 | 0.00 |
| 10 | 13.06 | 33.22 | 4.67 | 294 | 10 | 13.06 | 33.22 | 4.67 | 25.02 | 294 | 0.03 |
| 20 | 12.82 | 33.30 | 4.61 | 284 | 20 | 12.82 | 33.30 | 4.61 | 25.13 | 284 | 0.06 |
| 30 | 12.48 | 33.33 | 4.42 | 276 | 30 | 12.48 | 33.33 | 4.42 | 25.22 | 276 | 0.09 |
| 50 | 12.14 | 33.42 | 4.16 | 263 | 50 | 12.14 | 33.42 | 4.16 | 25.36 | 263 | 0.14 |
| 75 | 11.02 | 33.45 | 3.28 | 241 | 75 | 11.02 | 33.45 | 3.28 | 25.59 | 241 | 0.20 |
| **67.55** | BLACK DOUGLAS; November 19, 1952; 1750 GCT; 36°39'N, 122°26'W; sounding, 1250 fm; wind, 360°, force 2; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 15.58 | 32.94 | 4.49 | 365 | 0 | 15.58 | 32.94 | 4.49 | 24.28 | 365 | 0.00 |
| 10 | 15.56 | 32.94 | 4.50 | 365 | 10 | 15.56 | 32.94 | 4.50 | 24.28 | 365 | 0.04 |
| 20 | 15.56 | 32.96 | 4.56 | 363 | 20 | 15.56 | 32.96 | 4.56 | 24.30 | 363 | 0.07 |
| 35 | 13.50 | 32.98 | 4.80 | 320 | 30 | 15.55 | 32.98 | 4.74 | 24.32 | 362 | 0.11 |
| 50 | 11.32 | 32.94 | 4.69 | 284 | 50 | 11.32 | 32.94 | 4.69 | 25.14 | 284 | 0.17 |
| 65 | 10.16 | 32.90 | 4.42 | 267 | 75 | 10.16 | 33.12 | 3.96 | 25.48 | 251 | 0.24 |
| 79 | 10.14 | 33.15 | 3.86 | 249 | 100 | 8.88 | 33.26 | 3.53 | 25.80 | 221 | 0.30 |
| 98 | 8.92 | 33.23 | 3.59 | 224 | 150 | 8.16 | 33.72 | 2.81 | 26.27 | 176 | 0.40 |
| 123 | 8.50 | 33.48 | 3.24 | 199 | 200 | 8.34 | 34.02 | 1.78 | 26.47 | 157 | 0.49 |
| 151 | 8.15 | 33.73 | 2.79 | 175 | 250 | 7.71 | 34.08 | 1.62 | 26.62 | 143 | 0.56 |
| 198 | 8.34 | 34.02 | 1.80 | 157 | 300 | 6.81 | 34.06 | 1.37 | 26.73 | 133 | 0.63 |
| 244 | 7.86 | 34.08 | 1.66 | 145 | 400 | 6.28 | 34.14 | 0.80 | 26.86 | 120 | 0.76 |
| 290 | 6.95 | 34.06 | 1.42 | 134 | 500 | 5.72 | 34.20 | 0.44 | 26.98 | 109 | 0.89 |
| 387 | 6.34 | 34.13 | 0.85 | 122 | 600 | (4.90) | (34.26) | | (27.12) | (95) | (0.99) |
| 483 | 5.82 | 34.19 | 0.47 | 111 | | | | | | | |
| 586 | 5.07 | 34.25 | 0.40 | 98 | | | | | | | |
| **67.65** | BLACK DOUGLAS; November 19, 1952; 1123 GCT; 36°19'N, 123°09'W; sounding, 1800 fm; wind, 360°, force 2; weather, clear; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | 15.76 | 32.93 | 4.37 | 370 | 0 | 15.76 | 32.93 | 4.37 | 24.23 | 370 | 0.00 |
| 9 | 15.76 | 32.94 | 4.76 | 369 | 10 | 15.76 | 32.94 | 4.75 | 24.24 | 369 | 0.04 |
| 18 | 15.77 | 32.95 | 4.62 | 369 | 20 | 15.76 | 32.95 | 4.61 | 24.25 | 368 | 0.07 |
| 33 | 15.76 | 32.94 | 4.66 | 369 | 30 | 15.76 | 32.94 | 4.61 | 24.24 | 369 | 0.11 |
| 47 | 15.01 | 32.91 | 5.12 | 356 | 50 | 13.30 | 32.91 | 5.13 | 24.74 | 322 | 0.18 |
| 62 | 11.48 | 32.92 | 5.09 | 288 | 75 | 11.83 | 33.24 | 4.48 | 25.28 | 270 | 0.25 |
| 77 | 11.84 | 33.25 | 4.42 | 270 | 100 | 10.38 | 33.32 | 3.41 | 25.60 | 240 | 0.32 |
| 96 | 10.60 | 33.30 | 3.49 | 245 | 150 | 9.58 | 33.65 | 2.49 | 25.99 | 203 | 0.43 |
| 119 | 9.93 | 33.44 | 3.07 | 224 | 200 | 8.87 | 33.92 | 1.80 | 26.31 | 172 | 0.53 |
| 147 | 9.63 | 33.62 | 2.53 | 206 | 250 | 8.54 | 33.98 | 1.52 | 26.41 | 162 | 0.61 |
| 191 | 8.90 | 33.90 | 1.93 | 174 | 300 | 7.40 | 33.96 | 2.02 | 26.57 | 148 | 0.69 |
| 238 | 8.70 | 33.98 | 1.43 | 165 | 400 | 6.20 | 33.96 | 1.14 | 26.73 | 132 | 0.84 |
| 284 | 7.62 | 33.97 | 2.08 | 150 | 500 | 5.62 | 34.12 | 0.65 | 26.93 | 114 | 0.97 |
| 382 | 6.33 | 33.95 | 1.29 | 135 | 600 | (5.22) | (34.15) | | (27.00) | (107) | (1.08) |
| 479 | 5.72 | 34.11 | 0.66 | 116 | | | | | | | |
| 582 | 5.28 | 34.15 | 0.62 | 108 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| BLACK DOUGLAS; November 18, 1952; 0257 GCT; 36°10.5'N, 121°45.5'W; sounding, 260 fm; wind, calm; weather, clear; sea, slight; wire angle, 03°. | | | | | | | | | | | 70.51 |
| 0 | 13.02 | 33.24 | 4.59 | 292 | 0 | 13.02 | 33.24 | 4.59 | 25.05 | 292 | 0.00 |
| 10 | 12.55 | 33.25 | 4.52 | 283 | 10 | 12.55 | 33.25 | 4.52 | 25.15 | 283 | 0.03 |
| 25 | 12.36 | 33.28 | 4.29 | 277 | 20 | 12.42 | 33.27 | 4.38 | 25.19 | 279 | 0.06 |
| 51 | 11.02 | 33.27 | 3.91 | 254 | 30 | 12.22 | 33.28 | 4.22 | 25.23 | 274 | 0.08 |
| 75 | 10.51 | 33.35 | 3.52 | 240 | 50 | 11.06 | 33.27 | 3.92 | 25.44 | 255 | 0.14 |
| 99 | 9.86 | 33.53 | 2.83 | 216 | 75 | 10.51 | 33.35 | 3.52 | 25.60 | 240 | 0.20 |
| 152 | 9.18 | 33.85 | 1.94 | 182 | 100 | 9.83 | 33.53 | 2.82 | 25.85 | 215 | 0.26 |
| 199 | 8.93 | 34.03 | - | 164 | 150 | 9.20 | 33.84 | 2.00 | 26.20 | 183 | 0.36 |
| | | | | | 200 | (8.92) | (34.04) | | (26.40) | (164) | (0.45) |
| BLACK DOUGLAS; November 18, 1952; 1028 GCT; 35°53'N, 122°23'W; sounding, 1700 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 08°. | | | | | | | | | | | 70.60 |
| 0 | 13.30 | 33.22 | 4.79 | 299 | 0 | 13.30 | 33.22 | 4.79 | 24.98 | 299 | 0.00 |
| 10 | 13.29 | 33.22 | 4.77 | 299 | 10 | 13.29 | 33.22 | 4.77 | 24.98 | 299 | 0.03 |
| 25 | 13.26 | 33.24 | 4.76 | 297 | 20 | 13.27 | 33.23 | 4.76 | 24.99 | 298 | 0.06 |
| 50 | 11.11 | 33.28 | 3.84 | 255 | 30 | 13.24 | 33.25 | 4.68 | 25.01 | 296 | 0.09 |
| 74 | 9.35 | 33.47 | 3.47 | 212 | 50 | 11.11 | 33.28 | 3.84 | 25.44 | 255 | 0.14 |
| 99 | 9.18 | 33.64 | 2.57 | 197 | 75 | 9.35 | 33.48 | 3.43 | 25.89 | 212 | 0.20 |
| 151 | 8.58 | 33.87 | 2.20 | 171 | 100 | 9.17 | 33.65 | 2.55 | 26.06 | 196 | 0.25 |
| 197 | 8.24 | 34.02 | 2.01 | 155 | 150 | 8.58 | 33.86 | 2.20 | 26.31 | 172 | 0.35 |
| 244 | 7.85 | - | - | | 200 | 8.21 | 34.03 | 2.00 | 26.50 | 154 | 0.43 |
| 290 | 7.66 | 34.16 | 1.03 | 137 | 250 | 7.82 | 34.14 | 1.47 | 26.65 | 140 | 0.51 |
| 386 | 6.54 | 34.17 | 0.68 | 121 | 300 | 7.59 | 34.16 | 0.98 | 26.70 | 136 | 0.58 |
| 479 | 5.92 | 34.19 | 0.44 | 112 | 400 | 6.43 | 34.17 | 0.63 | 26.86 | 120 | 0.71 |
| 576 | 5.40 | 34.24 | 0.32 | 102 | 500 | 5.81 | 34.20 | 0.41 | 26.97 | 110 | 0.83 |
| 766 | 4.65 | 34.33 | 0.27 | 87 | 600 | 5.30 | 34.25 | 0.30 | 27.07 | 100 | 0.94 |
| 954 | 3.98 | 34.48 | 0.31 | 69 | 700 | 4.90 | 34.29 | 0.28 | 27.15 | 93 | 1.05 |
| 1148 | 3.44 | 34.47 | 0.51 | 65 | 800 | 4.52 | 34.36 | 0.28 | 27.24 | 84 | 1.14 |
| | | | | | 1000 | 3.84 | 34.49 | 0.33 | 27.42 | 67 | 1.31 |
| BLACK DOUGLAS; November 18, 1952; 1605 GCT; 35°33'N, 123°06'W; sounding, 2180 fm; wind, 340°, force 1; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | 70.70 |
| 0 | 13.11 | 33.30 | 4.72 | 289 | 0 | 13.11 | 33.30 | 4.72 | 25.08 | 289 | 0.00 |
| 10 | 13.10 | 33.30 | 4.72 | 289 | 10 | 13.10 | 33.30 | 4.72 | 25.08 | 289 | 0.03 |
| 20 | 13.08 | 33.32 | 4.73 | 287 | 20 | 13.08 | 33.32 | 4.73 | 25.10 | 287 | 0.06 |
| 35 | 11.62 | 33.34 | 4.01 | 259 | 30 | 13.00 | 33.34 | 4.33 | 25.13 | 284 | 0.09 |
| 50 | 10.76 | 33.36 | 3.52 | 243 | 50 | 10.76 | 33.36 | 3.52 | 25.56 | 243 | 0.14 |
| 65 | 9.90 | 33.41 | 3.33 | 225 | 75 | 9.60 | 33.50 | 3.05 | 25.87 | 214 | 0.20 |
| 79 | 9.51 | 33.56 | 2.94 | 208 | 100 | 8.93 | 33.72 | 2.55 | 26.15 | 187 | 0.25 |
| 98 | 8.98 | 33.71 | 2.58 | 189 | 150 | 8.41 | 33.91 | 2.17 | 26.38 | 166 | 0.34 |
| 122 | 8.82 | 33.83 | 2.41 | 178 | 200 | 8.20 | 34.07 | 1.49 | 26.53 | 151 | 0.42 |
| 150 | 8.41 | 33.91 | 2.17 | 166 | 250 | 7.62 | 34.15 | 1.08 | 26.68 | 137 | 0.49 |
| 197 | 8.22 | 34.06 | 1.51 | 152 | 300 | 7.14 | 34.17 | 0.83 | 26.77 | 129 | 0.56 |
| 243 | 7.70 | 34.14 | 1.11 | 139 | 400 | 6.41 | 34.20 | 0.58 | 26.89 | 117 | 0.69 |
| 290 | 7.21 | 34.17 | 0.86 | 130 | 500 | 5.76 | 34.23 | 0.40 | 27.00 | 107 | 0.81 |
| 388 | 6.52 | 34.20 | 0.61 | 119 | 600 | (5.45) | (34.32) | | (27.11) | (97) | (0.91) |
| 484 | 5.84 | 34.22 | 0.42 | 109 | | | | | | | |
| 589 | 5.48 | 34.31 | 0.33 | 98 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 7080 | BLACK DOUGLAS; November 18, 1952; 2227 GCT; 35°13'N, 123°48'W; sounding, 2240 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 07°. | | | | | | | | | | |
| 0 | 15.24 | 32.97 | 4.62 | 356 | 0 | 15.24 | 32.97 | 4.62 | 24.38 | 356 | 0.00 |
| 10 | 15.09 | 32.98 | 4.55 | 352 | 10 | 15.09 | 32.98 | 4.55 | 24.42 | 352 | 0.04 |
| 25 | 15.04 | 32.97 | 4.60 | 352 | 20 | 15.04 | 32.97 | 4.58 | 24.42 | 352 | 0.07 |
| 50 | 13.30 | 33.15 | 4.72 | 304 | 30 | 15.02 | 32.98 | 4.63 | 24.43 | 351 | 0.11 |
| 73 | 10.35 | 33.00 | 4.44 | 263 | 50 | 13.30 | 33.15 | 4.72 | 24.92 | 304 | 0.17 |
| 97 | 9.10 | 33.19 | 3.71 | 229 | 75 | 10.00 | 33.00 | 4.43 | 25.41 | 257 | 0.24 |
| 148 | 8.98 | 33.84 | 2.16 | 179 | 100 | 9.05 | 33.23 | 3.58 | 25.75 | 226 | 0.30 |
| 194 | 8.66 | 34.01 | 1.59 | 162 | 150 | 8.96 | 33.85 | 2.11 | 26.25 | 178 | 0.40 |
| 241 | 8.18 | 34.11 | 1.32 | 148 | 200 | 8.59 | 34.03 | 1.55 | 26.44 | 159 | 0.49 |
| 288 | 7.74 | 34.13 | 1.19 | 140 | 250 | 8.10 | 34.12 | 1.30 | 26.59 | 146 | 0.57 |
| 385 | 6.32 | 34.09 | 1.06 | 124 | 300 | 7.54 | 34.12 | 1.18 | 26.67 | 138 | 0.64 |
| 478 | 5.67 | 34.13 | 0.70 | 113 | 400 | 6.19 | 34.10 | 1.00 | 26.84 | 122 | 0.78 |
| 576 | 5.37 | 34.23 | 0.38 | 103 | 500 | 5.60 | 34.15 | 0.62 | 26.95 | 111 | 0.90 |
| 769 | 4.50 | 34.34 | 0.28 | 85 | 600 | 5.22 | 34.24 | 0.35 | 27.07 | 100 | 1.01 |
| 959 | 3.96 | 34.45 | 0.36 | 71 | 700 | 4.74 | 34.30 | 0.28 | 27.17 | 90 | 1.11 |
| 1159 | 3.46 | 34.49 | 0.59 | 63 | 800 | 4.42 | 34.36 | 0.30 | 27.25 | 83 | 1.21 |
| | | | | | 1000 | 3.83 | 34.46 | 0.39 | 27.40 | 69 | 1.38 |
| 7755 | BLACK DOUGLAS; November 15, 1952; 0825 GCT; 34°54.5'N, 121°13'W; sounding, 300 fm; wind, 220°, force 4; weather, cloudy; sea, rough; wire angle, 28°. | | | | | | | | | | |
| 0 | 15.00 | 33.01 | 4.63 | 348 | 0 | 15.00 | 33.01 | 4.63 | 24.46 | 348 | 0.00 |
| 8 | 14.98 | 33.01 | 4.66 | 348 | 10 | 14.98 | 33.01 | 4.66 | 24.46 | 348 | 0.03 |
| 22 | 14.99 | 33.00 | 4.64 | 349 | 20 | 14.99 | 33.00 | 4.63 | 24.45 | 349 | 0.07 |
| 44 | 12.72 | 32.90 | 4.93 | 312 | 30 | 15.00 | 33.00 | 4.71 | 24.45 | 349 | 0.10 |
| 66 | 11.26 | 32.84 | 4.58 | 290 | 50 | 12.32 | 32.87 | 4.93 | 24.90 | 306 | 0.17 |
| 88 | 9.98 | 33.16 | 3.88 | 245 | 75 | 10.62 | 32.94 | 4.27 | 25.26 | 272 | 0.24 |
| 132 | 8.70 | 33.61 | 2.83 | 192 | 100 | 9.53 | 33.31 | 3.58 | 25.73 | 227 | 0.31 |
| 171 | 8.30 | 33.87 | 2.21 | 167 | 150 | 8.51 | 33.76 | 2.51 | 26.25 | 178 | 0.41 |
| 209 | 8.02 | 33.98 | 1.99 | 155 | 200 | 8.08 | 33.95 | 2.05 | 26.46 | 158 | 0.49 |
| 246 | 7.94 | 34.14 | 1.11 | 142 | 250 | 7.91 | 34.15 | 1.10 | 26.64 | 141 | 0.57 |
| 290 | 7.62 | 34.16 | 1.05 | 136 | 300 | 7.47 | 34.16 | 0.98 | 26.71 | 134 | 0.64 |
| 331 | 7.06 | 34.17 | 0.81 | 128 | 400 | 6.36 | 34.14 | 0.73 | 26.85 | 121 | 0.77 |
| 374 | 6.69 | 34.15 | 0.79 | 124 | | | | | | | |
| 418 | 6.14 | 34.13 | 0.69 | 119 | | | | | | | |
| 7765 | BLACK DOUGLAS; November 15, 1952; 0116 GCT; 34°34'N, 121°55'W; sounding, 2060 fm; wind, 300°, force 3; weather, partly cloudy; sea, high; wire angle, 08°. | | | | | | | | | | |
| 0 | 14.04 | 33.17 | 4.78 | 317 | 0 | 14.04 | 33.17 | 4.78 | 24.79 | 317 | 0.00 |
| 10 | 14.02 | 33.16 | 4.81 | 317 | 10 | 14.02 | 33.16 | 4.81 | 24.78 | 317 | 0.03 |
| 20 | 13.98 | 33.19 | 4.83 | 314 | 20 | 13.98 | 33.19 | 4.83 | 24.81 | 314 | 0.06 |
| 37 | 13.39 | 33.22 | 4.85 | 301 | 30 | 13.71 | 33.21 | 4.85 | 24.89 | 308 | 0.09 |
| 55 | 10.97 | 33.30 | 3.84 | 251 | 50 | 11.65 | 33.27 | 4.20 | 25.33 | 265 | 0.15 |
| 69 | 9.82 | 33.48 | 3.14 | 219 | 75 | 9.61 | 33.56 | 2.92 | 25.91 | 210 | 0.21 |
| 84 | 9.32 | 33.64 | 2.67 | 199 | 100 | 8.92 | 33.71 | 2.53 | 26.14 | 188 | 0.26 |
| 108 | 8.79 | 33.76 | 2.46 | 182 | 150 | 8.30 | 33.90 | 2.20 | 26.39 | 165 | 0.35 |
| 131 | 8.56 | 33.88 | 1.99 | 170 | 200 | 7.75 | 33.95 | 2.00 | 26.51 | 153 | 0.43 |
| 160 | 8.18 | 33.91 | 2.30 | 162 | 250 | 7.13 | 34.02 | 1.53 | 26.65 | 140 | 0.51 |
| 210 | 7.62 | 33.96 | 1.89 | 151 | 300 | 6.69 | 34.08 | 1.10 | 26.76 | 130 | 0.58 |
| 265 | 6.98 | 34.04 | 1.41 | 136 | 400 | 5.98 | 34.13 | 0.67 | 26.89 | 117 | 0.70 |
| 311 | 6.60 | 34.09 | 1.02 | 128 | 500 | 5.51 | 34.25 | 0.40 | 27.04 | 103 | 0.82 |
| 419 | 5.88 | 34.15 | 0.59 | 114 | 600 | 5.09 | 34.31 | 0.29 | 27.14 | 93 | 0.92 |
| 525 | 5.40 | 34.28 | 0.36 | 99 | | | | | | | |
| 633 | 4.96 | 34.32 | 0.28 | 91 | | | | | | | |
| 8051 | BLACK DOUGLAS; November 12, 1952; 2224, 2235 GCT; 34°26.5'N, 120°32.5'W; sounding, 65 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 06°, 06°. | | | | | | | | | | |
| 0 | 15.60 | 33.43 | 4.68 | 330 | 0 | 15.60 | 33.43 | 4.68 | 24.65 | 330 | 0.00 |
| 10 | 15.60 | 33.42 | 4.56 | 331 | 10 | 15.60 | 33.42 | 4.56 | 24.64 | 331 | 0.03 |
| 20 | 14.98 | 33.42 | 4.53 | 318 | 20 | 14.98 | 33.42 | 4.53 | 24.78 | 318 | 0.07 |
| | | | | | 30 | 13.74 | 33.39 | 4.26 | 25.02 | 295 | 0.10 |
| 30 | 13.74 | 33.39 | 4.26 | 295 | 50 | 12.08 | 33.27 | 4.07 | 25.25 | 273 | 0.15 |
| 50 | 12.08 | 33.27 | 4.07 | 273 | 75 | 10.95 | 33.33 | 3.49 | 25.51 | 249 | 0.22 |
| 75 | 10.95 | 33.33 | 3.49 | 249 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

BLACK DOUGLAS; November 13, 1952; 0124 GCT; 34°19'N, 120°48'W; sounding, 410 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 13°. 80.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.30 | 33.40 | 4.72 | 326 | 0 | 15.30 | 33.40 | 4.72 | 24.69 | 326 | 0.00 |
| 9 | 15.28 | 33.44 | 4.73 | 322 | 10 | 15.29 | 33.44 | 4.72 | 24.73 | 323 | 0.03 |
| 20 | 15.28 | 33.39 | 4.65 | 326 | 20 | 15.28 | 33.39 | 4.65 | 24.69 | 326 | 0.06 |
| 34 | 15.06 | 33.40 | 4.66 | 321 | 30 | 15.26 | 33.40 | 4.66 | 24.70 | 325 | 0.10 |
| 48 | 12.72 | 33.33 | 4.21 | 280 | 50 | 12.62 | 33.33 | 4.13 | 25.20 | 278 | 0.16 |
| 62 | 11.88 | 33.33 | 3.74 | 265 | 75 | 10.75 | 33.45 | 3.25 | 25.63 | 236 | 0.22 |
| 76 | 10.60 | 33.46 | 3.21 | 233 | 100 | 9.68 | 33.76 | 2.44 | 26.06 | 196 | 0.28 |
| 95 | 9.75 | 33.74 | 2.53 | 199 | 150 | 9.15 | 33.90 | 1.86 | 26.25 | 177 | 0.37 |
| 118 | 9.59 | 33.81 | 2.18 | 191 | 200 | 8.98 | 34.04 | 1.65 | 26.39 | 164 | 0.46 |
| 145 | 9.20 | 33.89 | 1.89 | 179 | 250 | 8.61 | 34.18 | 1.30 | 26.56 | 149 | 0.54 |
| 190 | 9.06 | 34.02 | 1.72 | 167 | 300 | 8.17 | 34.24 | 1.20 | 26.67 | 138 | 0.61 |
| 235 | 8.70 | 34.13 | 1.39 | 154 | 400 | 7.13 | 34.20 | 1.00 | 26.79 | 126 | 0.75 |
| 281 | 8.38 | 34.24 | 1.20 | 141 | 500 | 6.13 | 34.24 | 0.50 | 26.96 | 111 | 0.88 |
| 380 | 7.32 | 34.19 | 1.13 | 130 | | | | | | | |
| 475 | 6.42 | 34.23 | 0.55 | 115 | | | | | | | |
| 577 | 5.20 | 34.26 | 0.39 | 98 | | | | | | | |

BLACK DOUGLAS; November 13, 1952; 0519 GCT; 34°09'N, 121°09'W; sounding, 1190 fm; wind, 310°, force 2; weather, partly cloudy; sea, rough; wire angle, 17°. 80.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.21 | 33.09 | 4.66 | 347 | 0 | 15.21 | 33.09 | 4.66 | 24.48 | 347 | 0.00 |
| 10 | 15.20 | 33.07 | 4.69 | 348 | 10 | 15.20 | 33.07 | 4.69 | 24.46 | 348 | 0.03 |
| 24 | 15.14 | 33.09 | 4.58 | 345 | 20 | 15.15 | 33.09 | 4.60 | 24.49 | 345 | 0.07 |
| 48 | 11.78 | 32.97 | 4.55 | 289 | 30 | 14.40 | 33.08 | 4.58 | 24.64 | 331 | 0.10 |
| 72 | 10.38 | 33.12 | 3.95 | 255 | 50 | 11.52 | 32.97 | 4.53 | 25.12 | 285 | 0.17 |
| 95 | 9.90 | 33.45 | 3.06 | 222 | 75 | 10.32 | 33.17 | 3.85 | 25.49 | 250 | 0.23 |
| 146 | 9.14 | 33.89 | 2.01 | 178 | 100 | 9.77 | 33.49 | 2.95 | 25.83 | 217 | 0.29 |
| 192 | 8.84 | 34.06 | 1.44 | 161 | 150 | 9.12 | 33.91 | 1.93 | 26.27 | 176 | 0.39 |
| 237 | 8.28 | 34.08 | 1.28 | 151 | 200 | 8.75 | 34.06 | 1.41 | 26.44 | 160 | 0.48 |
| 282 | 7.66 | 34.12 | 1.05 | 139 | 250 | 8.08 | 34.09 | 1.21 | 26.57 | 148 | 0.56 |
| 374 | 6.72 | 34.18 | 0.61 | 123 | 300 | 7.44 | 34.13 | 0.96 | 26.69 | 136 | 0.63 |
| 463 | 6.20 | 34.31 | 0.38 | 106 | 400 | 6.59 | 34.23 | 0.54 | 26.89 | 117 | 0.76 |
| 557 | 5.60 | 34.29 | 0.24 | 101 | 500 | 5.95 | 34.30 | 0.31 | 27.03 | 104 | 0.88 |
| 743 | 4.84 | 34.32 | 0.23 | 90 | 600 | 5.42 | 34.30 | 0.26 | 27.09 | 98 | 0.98 |
| 930 | 4.16 | - | 0.23 | | 700 | 5.02 | 34.31 | 0.24 | 27.15 | 93 | 1.09 |
| 1131 | 3.63 | - | 0.51 | | 800 | 4.61 | | 0.22 | | | |
| | | | | | 1000 | 3.95 | | 0.32 | | | |

BLACK DOUGLAS; November 13, 1952; 1203 GCT; 33°49'N, 121°51'W; sounding, 2020 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 23°. 80.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.34 | 33.08 | 4.36 | 394 | 0 | 17.34 | 33.08 | 4.36 | 23.98 | 394 | 0.00 |
| 9 | 17.32 | 33.06 | 4.39 | 395 | 10 | 17.32 | 33.06 | 4.38 | 23.97 | 395 | 0.04 |
| 18 | 17.32 | 33.05 | 4.38 | 395 | 20 | 17.32 | 33.05 | 4.39 | 23.96 | 395 | 0.08 |
| 33 | 17.26 | 33.08 | 4.39 | 392 | 30 | 17.29 | 33.08 | 4.39 | 23.99 | 392 | 0.12 |
| 50 | 13.56 | 32.96 | 5.03 | 323 | 50 | 13.56 | 32.96 | 5.03 | 24.72 | 323 | 0.19 |
| 64 | 12.26 | 32.97 | 4.89 | 298 | 75 | 11.66 | 33.02 | 4.75 | 25.14 | 284 | 0.27 |
| 76 | 11.65 | 33.02 | 4.77 | 283 | 100 | 10.98 | 33.05 | 4.30 | 25.28 | 270 | 0.34 |
| 98 | 11.05 | 33.04 | 4.34 | 272 | 150 | 9.12 | 33.68 | 2.52 | 26.09 | 193 | 0.45 |
| 118 | 9.46 | 33.33 | 3.90 | 224 | 200 | 8.86 | 33.95 | 1.79 | 26.34 | 169 | 0.55 |
| 142 | 9.18 | 33.59 | 2.81 | 201 | 250 | 8.12 | 34.05 | 1.52 | 26.53 | 151 | 0.63 |
| 185 | 9.04 | 33.93 | 1.84 | 174 | 300 | 7.52 | 34.10 | 1.26 | 26.66 | 139 | 0.70 |
| 232 | 8.24 | 34.01 | 1.69 | 156 | 400 | 6.39 | 34.14 | 0.78 | 26.84 | 121 | 0.84 |
| 270 | 7.94 | 34.09 | 1.38 | 146 | 500 | 5.87 | 34.23 | 0.41 | 26.98 | 108 | 0.96 |
| 362 | 6.72 | 34.11 | 0.98 | 128 | | | | | | | |
| 459 | 6.04 | 34.19 | 0.50 | 113 | | | | | | | |
| 564 | 5.68 | 34.29 | 0.30 | 102 | | | | | | | |

SIO

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5211

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 80.80 | BLACK DOUGLAS; November 13, 1952; 1806 GCT; 33°29'N, 122°32'W; sounding, 2060 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 02°. | | | | | | | | | | |
| 0 | 17.58 | 33.16 | 4.41 | 393 | 0 | 17.58 | 33.16 | 4.41 | 23.99 | 393 | 0.00 |
| 10 | 17.56 | 33.16 | 4.41 | 393 | 10 | 17.56 | 33.16 | 4.41 | 23.99 | 393 | 0.04 |
| 25 | 17.56 | 33.14 | 4.34 | 394 | 20 | 17.57 | 33.14 | 4.35 | 23.97 | 394 | 0.08 |
| 50 | 16.72 | 33.17 | 4.61 | 373 | 30 | 17.58 | 33.14 | 4.38 | 23.97 | 395 | 0.12 |
| 74 | 12.65 | 33.01 | 4.84 | 302 | 50 | 16.72 | 33.17 | 4.61 | 24.20 | 373 | 0.20 |
| 98 | 11.92 | 33.12 | 4.56 | 281 | 75 | 12.61 | 33.01 | 4.84 | 24.95 | 301 | 0.28 |
| 151 | 9.42 | 33.33 | 3.71 | 224 | 100 | 11.90 | 33.13 | 4.52 | 25.18 | 280 | 0.35 |
| 199 | 8.57 | 33.84 | 2.56 | 173 | 150 | 9.46 | 33.33 | 3.71 | 25.76 | 224 | 0.48 |
| 246 | 8.02 | 33.98 | 2.14 | 155 | 200 | 8.54 | 33.84 | 2.54 | 26.30 | 173 | 0.58 |
| 292 | 7.42 | 34.04 | 1.86 | 142 | 250 | 7.97 | 33.99 | 2.12 | 26.51 | 153 | 0.66 |
| 391 | 6.57 | 34.13 | 0.91 | 124 | 300 | 7.35 | 34.05 | 1.78 | 26.64 | 140 | 0.74 |
| 484 | 6.05 | 34.21 | 0.46 | 112 | 400 | 6.52 | 34.14 | 0.87 | 26.83 | 123 | 0.88 |
| 582 | 5.47 | 34.28 | 0.26 | 100 | 500 | 5.96 | 34.22 | 0.42 | 26.96 | 110 | 1.00 |
| 774 | 4.64 | 34.34 | 0.29 | 86 | 600 | 5.38 | 34.29 | 0.27 | 27.09 | 98 | 1.11 |
| 962 | 3.97 | 34.48 | 0.39 | 69 | 700 | 4.94 | 34.30 | 0.28 | 27.15 | 93 | 1.21 |
| 1158 | 3.54 | 34.53 | 0.54 | 61 | 800 | 4.52 | 34.36 | 0.30 | 27.24 | 84 | 1.31 |
| | | | | | 1000 | 3.85 | 34.49 | 0.43 | 27.42 | 67 | 1.48 |
| 80.90 | BLACK DOUGLAS; November 14, 1952; 0032 GCT; 33°09'N, 123°13'W; sounding, 2400 fm; wind, 300°, force 3; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 17.61 | 33.10 | 4.64 | 398 | 0 | 17.61 | 33.10 | 4.64 | 23.93 | 398 | 0.00 |
| 10 | 17.59 | 33.12 | 4.35 | 396 | 10 | 17.59 | 33.12 | 4.35 | 23.95 | 396 | 0.04 |
| 20 | 17.54 | 33.19 | 4.43 | 390 | 20 | 17.54 | 33.19 | 4.43 | 24.02 | 390 | 0.08 |
| 35 | 17.52 | 33.21 | 4.47 | 388 | 30 | 17.53 | 33.21 | 4.47 | 24.04 | 388 | 0.12 |
| 50 | 17.55 | 33.08u | 4.37 | | 50 | 17.55 | 33.21 | 4.37 | 24.03 | 389 | 0.20 |
| 64 | 15.19 | 33.01 | 4.84 | 352 | 75 | 13.40 | 32.95 | 4.90 | 24.75 | 321 | 0.29 |
| 79 | 13.11 | 32.95 | 4.89 | 315 | 100 | 11.97 | 32.97 | 4.81 | 25.04 | 293 | 0.36 |
| 98 | 12.08 | 32.97 | 4.84 | 295 | 150 | 9.52 | 33.19 | 3.71 | 25.64 | 236 | 0.50 |
| 122 | 10.86 | 33.01 | 4.49 | 271 | 200 | 8.62 | 33.73 | 2.68 | 26.20 | 182 | 0.60 |
| 150 | 9.52 | 33.19 | 3.71 | 236 | 250 | 8.11 | 34.03 | 2.17 | 26.52 | 152 | 0.69 |
| 196 | 8.69 | 33.70 | 2.71 | 185 | 300 | 7.60 | 34.13 | 1.61 | 26.67 | 138 | 0.76 |
| 242 | 8.18 | 34.01 | 2.26 | 155 | 400 | 6.53 | 34.20 | 0.90 | 26.87 | 119 | 0.90 |
| 288 | 7.74 | 34.12 | 1.70 | 141 | 500 | 5.78 | 34.27 | 0.52 | 27.03 | 104 | 1.01 |
| 386 | 6.66 | 34.19 | 0.98 | 121 | 600 | (5.07) | (34.34) | | (27.17) | (91) | (1.12) |
| 483 | 5.90 | 34.26 | 0.56 | 106 | | | | | | | |
| 587 | 5.18 | 34.33 | 0.43 | 93 | | | | | | | |
| 80.100 | BLACK DOUGLAS; November 14, 1952; 0616 GCT; 32°49'N, 123°54'W; sounding, 2250 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 17.49 | 33.12 | 4.33 | 394 | 0 | 17.49 | 33.12 | 4.33 | 23.98 | 394 | 0.00 |
| 9 | 17.48 | 33.12 | 4.24 | 394 | 10 | 17.48 | 33.12 | 4.26 | 23.98 | 394 | 0.04 |
| 24 | 17.45 | 33.09 | 4.43 | 395 | 20 | 17.45 | 33.10 | 4.41 | 23.97 | 395 | 0.08 |
| 47 | 17.39 | 33.09 | 4.34 | 394 | 30 | 17.43 | 33.08 | 4.44 | 23.96 | 396 | 0.12 |
| 70 | 14.42 | 33.13 | 4.89 | 327 | 50 | 17.35 | 33.09 | 4.37 | 23.99 | 393 | 0.20 |
| 93 | 11.97 | 32.98 | 4.93 | 292 | 75 | 13.90 | 33.13 | 4.92 | 24.78 | 317 | 0.29 |
| 142 | 9.37 | 33.33 | 3.51 | 223 | 100 | 11.49 | 32.98 | 4.86 | 25.14 | 284 | 0.36 |
| 186 | 9.01 | 33.84 | 2.19 | 180 | 150 | 9.26 | 33.41 | 3.25 | 25.85 | 215 | 0.49 |
| 229 | 8.62 | 33.99 | 1.57 | 163 | 200 | 8.89 | 33.89 | 1.99 | 26.29 | 174 | 0.59 |
| 272 | 8.26 | 34.11 | 1.28 | 149 | 250 | 8.45 | 34.05 | 1.42 | 26.48 | 156 | 0.67 |
| 362 | 7.46 | 34.21 | 0.94 | 130 | 300 | 8.04 | 34.15 | 1.17 | 26.62 | 143 | 0.75 |
| 450 | 6.36 | 34.22 | 0.61 | 115 | 400 | 6.97 | 34.22 | 0.80 | 26.83 | 123 | 0.89 |
| 542 | 5.65 | 34.24 | 0.41 | 105 | 500 | 5.92 | 34.23 | 0.50 | 26.98 | 109 | 1.01 |
| 727 | 4.82 | 34.32 | 0.31 | 90 | 600 | 5.38 | 34.26 | 0.36 | 27.07 | 100 | 1.12 |
| 913 | 4.20a) | 34.46 | 0.41 | 73 | 700 | 4.93 | 34.30 | 0.32 | 27.15 | 92 | 1.22 |
| 1113 | 3.64 | 34.47 | 0.60 | 67 | 800 | 4.55 | 34.38 | 0.34 | 27.26 | 82 | 1.32 |
| | | | | | 1000 | 3.92 | 34.47 | 0.49 | 27.39 | 69 | 1.49 |

a) Mean value of 4.15 and 4.24°C.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BLACK DOUGLAS; November 12, 1952; 1212 GCT; 34°01'N, 119°02.5'W; sounding, 130 fm; wind, 080°, force 2; weather, cloudy; sea, slight; wire angle, 00°. 85.38

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.28 | 33.34 | 4.69 | 351 | 0 | 16.28 | 33.34 | 4.69 | 24.43 | 351 | 0.00 |
| 10 | 16.24 | 33.35 | 4.69 | 349 | 10 | 16.24 | 33.35 | 4.69 | 24.45 | 349 | 0.04 |
| 25 | 13.48 | 33.25 | 4.71 | 300 | 20 | 14.70 | 33.27 | 4.70 | 24.72 | 323 | 0.07 |
| 50 | 11.42 | 33.26 | 3.94 | 262 | 30 | 12.60 | 33.24 | 4.70 | 25.13 | 284 | 0.10 |
| 74 | 11.08 | 33.31 | 3.73 | 252 | 50 | 11.42 | 33.26 | 3.94 | 25.37 | 262 | 0.15 |
| 99 | 10.74 | 33.36 | 3.56 | 243 | 75 | 11.04 | 33.31 | 3.72 | 25.47 | 252 | 0.22 |
| 122 | 10.44 | 33.45 | 3.18 | 231 | 100 | 10.74 | 33.36 | 3.53 | 25.57 | 243 | 0.28 |
| 152 | 9.67 | 33.75 | 2.37 | 197 | 150 | 9.76 | 33.72 | 2.41 | 26.01 | 200 | 0.39 |

BLACK DOUGLAS; November 12, 1952; 1011 GCT; 33°57'N, 119°10.5'W; sounding, 380 fm; wind, 080°, force 2; weather, clear; sea, slight; wire angle, 07°. 85.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.61 | 33.35 | 4.87 | 358 | 0 | 16.61 | 33.35 | 4.87 | 24.36 | 358 | 0.00 |
| 10 | 16.64 | 33.34 | 4.66 | 359 | 10 | 16.64 | 33.34 | 4.66 | 24.35 | 359 | 0.04 |
| 20 | 16.58 | 33.36 | 4.63 | 356 | 20 | 16.58 | 33.36 | 4.63 | 24.38 | 356 | 0.07 |
| 35 | 14.13 | 33.20 | 4.86 | 317 | 30 | 15.40 | 33.27 | 4.81 | 24.57 | 337 | 0.11 |
| 50 | 11.96 | 33.19 | 4.28 | 276 | 50 | 11.96 | 33.19 | 4.28 | 25.21 | 276 | 0.17 |
| 64 | 11.24 | 33.28 | 3.86 | 257 | 75 | 10.70 | 33.32 | 3.55 | 25.54 | 245 | 0.23 |
| 78 | 10.66 | 33.34 | 3.49 | 243 | 100 | 9.85 | 33.49 | 3.09 | 25.82 | 219 | 0.29 |
| 97 | 9.94 | 33.47 | 3.15 | 222 | 150 | 9.62 | 33.85 | 2.18 | 26.14 | 188 | 0.39 |
| 121 | 9.54 | 33.66 | 2.74 | 201 | 200 | 9.21 | 34.08 | 1.70 | 26.38 | 165 | 0.49 |
| 149 | 9.62 | 33.85 | 2.18 | 188 | 250 | 8.39 | 34.13 | 1.40 | 26.55 | 149 | 0.57 |
| 195 | 9.25 | 34.07 | 1.72 | 166 | 300 | 8.18 | 34.22 | 1.05 | 26.66 | 139 | 0.64 |
| 241 | 8.64 | 34.11 | 1.44 | 154 | 400 | 7.49 | 34.30 | 0.50 | 26.82 | 124 | 0.78 |
| 287 | 8.25 | 34.20 | 1.14 | 142 | 500 | 6.54 | 34.32 | 0.28 | 26.97 | 110 | 0.90 |
| 383 | 7.66 | 34.30 | 0.54 | 126 | 600 | (5.68) | (34.40) | | (27.14) | (93) | (1.01) |
| 477 | 6.78 | 34.31 | 0.30 | 114 | | | | | | | |
| 580 | 5.83 | 34.39 | 0.23 | 96 | | | | | | | |

BLACK DOUGLAS; November 12, 1952; 0405 GCT; 33°37'N, 119°52'W; sounding, 130 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 04°. 85.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.76 | 33.35 | 4.44 | 361 | 0 | 16.76 | 33.35 | 4.44 | 24.33 | 361 | 0.00 |
| 10 | 16.74 | 33.34 | 4.46 | 361 | 10 | 16.74 | 33.34 | 4.46 | 24.32 | 361 | 0.04 |
| 20 | 14.64 | 33.31 | 4.72 | 319 | 20 | 14.64 | 33.31 | 4.72 | 24.77 | 319 | 0.07 |
| 30 | 12.73 | 33.21 | 4.30 | 289 | 30 | 12.73 | 33.21 | 4.30 | 25.08 | 289 | 0.10 |
| 50 | 10.97 | 33.33 | 3.69 | 249 | 50 | 10.97 | 33.33 | 3.69 | 25.50 | 249 | 0.15 |
| 75 | 9.74 | 33.54 | 2.91 | 213 | 75 | 9.74 | 33.54 | 2.91 | 25.88 | 213 | 0.21 |
| 100 | 9.17 | 33.81 | 2.34 | 184 | 100 | 9.17 | 33.81 | 2.34 | 26.18 | 184 | 0.26 |
| 125 | 8.96 | 33.91 | 2.14 | 174 | | | | | | | |

BLACK DOUGLAS; November 11, 1952; 2142 GCT; 33°17'N, 120°33.5'W; sounding, 750 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 11°. 85.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.32 | 33.16 | 4.55 | 365 | 0 | 16.32 | 33.16 | 4.55 | 24.28 | 365 | 0.00 |
| 10 | 16.24 | 33.19 | 4.51 | 361 | 10 | 16.24 | 33.19 | 4.51 | 24.32 | 361 | 0.04 |
| 20 | 15.55 | 33.22 | 4.64 | 344 | 20 | 15.55 | 33.22 | 4.64 | 24.50 | 344 | 0.07 |
| 34 | 14.00 | 33.18 | 4.73 | 315 | 30 | 14.40 | 33.21 | 4.72 | 24.74 | 321 | 0.10 |
| 49 | 12.77 | 33.09 | 4.65 | 299 | 50 | 12.40 | 33.09 | 4.63 | 25.05 | 292 | 0.17 |
| 63 | 11.18 | 33.10 | 4.21 | 269 | 75 | 10.80 | 33.19 | 3.75 | 25.42 | 256 | 0.24 |
| 77 | 10.77 | 33.22 | 3.63 | 254 | 100 | 9.93 | 33.60 | 2.71 | 25.89 | 212 | 0.29 |
| 96 | 9.98 | 33.58 | 2.79 | 214 | 150 | 9.22 | 33.89 | 2.04 | 26.24 | 179 | 0.39 |
| 119 | 9.76 | 33.71 | 2.42 | 201 | 200 | 8.18 | 33.96 | 2.02 | 26.45 | 159 | 0.48 |
| 147 | 9.30 | 33.89 | 2.06 | 180 | 250 | 7.73 | 34.08 | 1.60 | 26.61 | 143 | 0.56 |
| 192 | 8.30 | 33.94 | 2.05 | 162 | 300 | 7.65 | 34.17 | 1.03 | 26.69 | 136 | 0.63 |
| 236 | 7.76 | 34.06 | 1.80 | 145 | 400 | 7.10 | 34.26 | 0.56 | 26.84 | 122 | 0.76 |
| 280 | 7.71 | 34.14 | 1.19 | 139 | 500 | 5.73 | 34.21 | 0.47 | 26.98 | 108 | 0.88 |
| 375 | 7.35 | 34.27 | 0.58 | 124 | | | | | | | |
| 469 | 5.92 | 34.20 | 0.51 | 111 | | | | | | | |
| 570 | 5.58 | 34.31 | 0.34 | 99 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

90.28 BLACK DOUGLAS; November 9, 1952; 1920 GCT; 33°28.5'N, 117°46.5'W; sounding, 48 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.82 | 33.36 | 4.53 | 361 | 0 | 16.82 | 33.36 | 4.53 | 24.32 | 361 | 0.00 |
| 10 | 16.48 | 33.33 | 4.65 | 356 | 10 | 16.48 | 33.33 | 4.65 | 24.38 | 356 | 0.04 |
| 20 | 14.54 | 33.21 | 4.66 | 324 | 20 | 14.54 | 33.21 | 4.66 | 24.71 | 324 | 0.07 |
| 30 | 13.68 | 33.26 | 4.73 | 303 | 30 | 13.68 | 33.26 | 4.73 | 24.93 | 303 | 0.10 |
| 50 | 12.18 | 33.29 | 4.21 | 273 | 50 | 12.18 | 33.29 | 4.21 | 25.25 | 273 | 0.16 |

90.30 BLACK DOUGLAS; November 10, 1952; 0745 GCT; 33°24.5'N, 117°55'W; sounding, 330 fm; wind, missing; weather, fog; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.38 | 33.38 | 4.58 | 373 | 0 | 17.38 | 33.38 | 4.58 | 24.20 | 373 | 0.00 |
| 10 | 17.37 | 33.39 | 4.68 | 372 | 10 | 17.37 | 33.39 | 4.68 | 24.21 | 372 | 0.04 |
| 25 | 15.60 | 33.30 | 4.80 | 339 | 20 | 17.25 | 33.33 | 4.78 | 24.20 | 373 | 0.07 |
| 50 | 12.42 | 33.23 | 4.72 | 282 | 30 | 14.90 | 33.27 | 4.82 | 24.68 | 327 | 0.11 |
| 74 | 10.92 | 33.36 | 3.88 | 246 | 50 | 12.42 | 33.23 | 4.72 | 25.16 | 282 | 0.17 |
| 98 | 10.14 | 33.54 | 3.40 | 220 | 75 | 10.85 | 33.37 | 3.85 | 25.55 | 244 | 0.24 |
| 151 | 9.68 | 33.88 | 2.13 | 187 | 100 | 10.10 | 33.57 | 3.32 | 25.84 | 217 | 0.29 |
| 199 | 8.76 | 33.94 | 2.09 | 169 | 150 | 9.68 | 33.88 | 2.14 | 26.15 | 187 | 0.40 |
| 245 | 8.25 | 34.05 | 1.47 | 153 | 200 | 8.74 | 33.94 | 2.08 | 26.35 | 168 | 0.49 |
| 289 | 7.96 | 34.11 | 1.43 | 144 | 250 | 8.21 | 34.06 | 1.45 | 26.53 | 152 | 0.57 |
| 340 | 7.73 | 34.19 | 0.96 | 135 | 300 | 7.91 | 34.12 | 1.30 | 26.62 | 143 | 0.65 |
| 387 | 7.46 | 34.27 | 0.83 | 126 | 400 | 7.37 | 34.28 | 0.75 | 26.82 | 124 | 0.78 |
| 434 | 7.12 | 34.30 | 0.52 | 119 | 500 | (6.63) | (34.31) | | (26.95) | (112) | (0.91) |
| 483 | 6.76 | 34.31 | 0.27 | 113 | | | | | | | |

90.37 BLACK DOUGLAS; November 10, 1952; 1230 GCT; 33°11'N, 118°23.5'W; sounding, 620 fm; wind, 180°, force 1; weather, cloudy; sea, slight; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.50 | 33.41 | 4.46 | 373 | 0 | 17.50 | 33.41 | 4.46 | 24.20 | 373 | 0.00 |
| 9 | 17.48 | 33.41 | 4.46 | 373 | 10 | 17.47 | 33.41 | 4.46 | 24.20 | 372 | 0.04 |
| 24 | 14.45 | 33.26 | 5.10 | 319 | 20 | 15.60 | 33.31 | 4.98 | 24.56 | 339 | 0.07 |
| 48 | 11.18 | 33.19 | 3.99 | 263 | 30 | 13.10 | 33.23 | 5.00 | 25.02 | 294 | 0.10 |
| 72 | 10.04 | 33.42 | 3.33 | 227 | 50 | 10.96 | 33.19 | 3.94 | 25.40 | 259 | 0.16 |
| 95 | 10.01 | 33.62 | 2.76 | 212 | 75 | 10.02 | 33.44 | 3.25 | 25.75 | 225 | 0.22 |
| 144 | 9.34 | 33.94 | 2.04 | 177 | 100 | 10.01 | 33.67 | 2.67 | 25.93 | 208 | 0.28 |
| 188 | 8.66 | 34.04 | 1.94 | 160 | 150 | 9.15 | 33.95 | 2.01 | 26.29 | 174 | 0.37 |
| 232 | 8.49 | 34.15 | 1.54 | 149 | 200 | 8.62 | 34.08 | 1.89 | 26.48 | 156 | 0.46 |
| 275 | 7.91 | 34.19 | 1.17 | 138 | 250 | 8.25 | 34.16 | 1.39 | 26.60 | 145 | 0.53 |
| 367 | 7.34 | 34.30 | 0.59 | 122 | 300 | 7.75 | 34.22 | 1.00 | 26.72 | 133 | 0.61 |
| 455 | 6.79 | 34.35 | 0.32 | 111 | 400 | 7.15 | 34.32 | 0.48 | 26.88 | 118 | 0.74 |
| 547 | 6.09 | 34.38 | 0.22 | 100 | 500 | 6.43 | 34.37 | 0.28 | 27.02 | 105 | 0.85 |
| 640 | 5.48 | 34.38 | 0.23 | 93 | 600 | 5.72 | 34.38 | 0.23 | 27.12 | 95 | 0.96 |
| 731 | 4.98 | 34.44 | 0.21 | 82 | 700 | 5.13 | 34.42 | 0.22 | 27.22 | 86 | 1.06 |
| 923 | 4.31 | 34.46 | 0.31 | 74 | 800 | 4.67 | 34.45 | 0.23 | 27.30 | 78 | 1.15 |
| | | | | | 1000 | (4.10) | (34.46) | | (27.37) | (72) | (1.32) |

90.45 BLACK DOUGLAS; November 10, 1952; 1737 GCT; 32°54.5'N, 118°56'W; sounding, 960 fm; wind, 290°, force 1; weather, cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.46 | 33.46 | 4.53 | 346 | 0 | 16.46 | 33.46 | 4.53 | 24.48 | 346 | 0.00 |
| 10 | 16.40 | 33.47 | 4.58 | 344 | 10 | 16.40 | 33.47 | 4.58 | 24.50 | 344 | 0.03 |
| 20 | 14.06 | 33.32 | 4.93 | 306 | 20 | 14.06 | 33.32 | 4.93 | 24.90 | 306 | 0.07 |
| 35 | 11.91 | 33.33 | 4.06 | 265 | 30 | 12.50 | 33.32 | 4.40 | 25.21 | 277 | 0.10 |
| 50 | 10.72 | 33.49 | 3.45 | 233 | 50 | 10.72 | 33.49 | 3.45 | 25.67 | 233 | 0.15 |
| 64 | 9.90 | 33.53 | 3.00 | 217 | 75 | 9.62 | 33.60 | 2.82 | 25.94 | 207 | 0.20 |
| 79 | 9.54 | 33.65 | 2.74 | 202 | 100 | 9.01 | 33.87 | 2.45 | 26.25 | 178 | 0.25 |
| 98 | 9.03 | 33.87 | 2.48 | 178 | 150 | 8.56 | 34.01 | 2.14 | 26.43 | 160 | 0.34 |
| 122 | 8.80 | 33.93 | 2.23 | 170 | 200 | 8.78 | 34.32 | 1.30 | 26.64 | 141 | 0.41 |
| 151 | 8.55 | 34.01 | 2.13 | 160 | 250 | 8.53 | 34.37 | 0.92 | 26.72 | 133 | 0.48 |
| 197 | 8.77 | 34.30 | 1.33 | 142 | 300 | 8.09 | | 0.80 | | | |
| 243 | 8.62 | 34.37 | 0.94 | 135 | 400 | 7.30 | | 0.46 | | | |
| 289 | 8.16 | 34.32 | 0.85 | 132 | 500 | 6.50 | | 0.25 | | | |
| 387 | 7.40 | 34.49u | 0.49 | | 600 | (5.74) | | | | | |
| 482 | 6.64 | 34.31 | 0.26 | 112 | | | | | | | |
| 586 | 5.86 | 34.36 | 0.21 | 98 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

BLACK DOUGLAS; November 10, 1952; 2255 GCT; 32°38.5'N, 119°29'W; sounding, 680 fm; wind, 260°, force 1; weather, partly cloudy; sea, slight; wire angle, 03°. 90.53

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.07 | 33.44 | 4.64 | 339 | 0 | 16.07 | 33.44 | 4.64 | 24.55 | 339 | 0.00 |
| 10 | 15.42 | 33.47 | 4.76 | 323 | 10 | 15.42 | 33.47 | 4.76 | 24.72 | 323 | 0.03 |
| 25 | 13.55 | 33.35 | 4.68 | 294 | 20 | 14.20 | 33.37 | 4.74 | 24.91 | 306 | 0.06 |
| 50 | 10.46 | 33.45 | 3.32 | 232 | 30 | 12.70 | 33.35 | 4.54 | 25.20 | 278 | 0.09 |
| 75 | 9.84 | 33.67 | 3.01 | 205 | 50 | 10.46 | 33.45 | 3.32 | 25.68 | 232 | 0.14 |
| 99 | 9.32 | 33.67 | 2.69 | 197 | 75 | 9.84 | 33.67 | 3.01 | 25.96 | 205 | 0.20 |
| 152 | 8.33 | 33.96 | 2.05 | 161 | 100 | 9.31 | 33.67 | 2.68 | 26.05 | 197 | 0.25 |
| 200 | 7.93 | 34.05 | 1.73 | 148 | 150 | 8.37 | 33.95 | 2.08 | 26.42 | 162 | 0.34 |
| 247 | 7.41 | 34.16 | 1.31 | 133 | 200 | 7.93 | 34.05 | 1.73 | 26.56 | 148 | 0.42 |
| 294 | 7.28 | 34.19 | 1.18 | 129 | 250 | 7.41 | 34.16 | 1.32 | 26.72 | 133 | 0.49 |
| 391 | 6.48 | 34.23 | 0.49 | 116 | 300 | 7.22 | 34.19 | 1.13 | 26.77 | 128 | 0.56 |
| 484 | 5.92 | 34.31 | 0.35 | 103 | 400 | 6.42 | 34.24 | 0.48 | 26.92 | 114 | 0.69 |
| 582 | 5.56 | 34.33 | 0.28 | 97 | 500 | 5.85 | 34.31 | 0.33 | 27.05 | 102 | 0.80 |
| 677 | 5.10 | 34.36 | 0.33 | 90 | 600 | 5.46 | 34.34 | 0.30 | 27.12 | 95 | 0.91 |
| 776 | 4.72 | 34.42 | 0.29 | 81 | 700 | 5.01 | 34.38 | 0.32 | 27.20 | 87 | 1.01 |
| 970 | 4.06 | 34.47 | 0.41 | 71 | 800 | 4.62 | 34.43 | 0.28 | 27.29 | 79 | 1.10 |
| | | | | | 1000 | (3.98) | (34.47) | (0.48) | (27.39) | (70) | (1.26) |

BLACK DOUGLAS; November 11, 1952; 0344 GCT; 32°25'N, 119°57.5'W; sounding, 450 fm; wind, missing; weather, partly cloudy; sea, slight; wire angle, 05°. 90.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.66 | 33.39 | 4.79 | 334 | 0 | 15.66 | 33.39 | 4.79 | 24.61 | 334 | 0.00 |
| 10 | 15.16 | 33.41 | 4.87 | 322 | 10 | 15.16 | 33.41 | 4.87 | 24.73 | 322 | 0.03 |
| 20 | 13.76 | 33.32 | 4.91 | 300 | 20 | 13.76 | 33.32 | 4.91 | 24.96 | 300 | 0.06 |
| 35 | 12.00 | 33.15 | 4.36 | 280 | 30 | 12.40 | 33.19 | 4.66 | 25.13 | 284 | 0.09 |
| 50 | 10.78 | 33.14 | 4.04 | 260 | 50 | 10.78 | 33.14 | 4.04 | 25.39 | 260 | 0.15 |
| 64 | 10.80 | 33.24 | 4.08 | 253 | 75 | 10.30 | 33.37 | 3.15 | 25.65 | 235 | 0.21 |
| 78 | 10.19 | 33.41 | 3.11 | 230 | 100 | 9.42 | 33.58 | 2.80 | 25.96 | 205 | 0.27 |
| 97 | 9.59 | 33.55 | 2.84 | 210 | 150 | 8.96 | 34.00 | 1.82 | 26.36 | 167 | 0.36 |
| 120 | 9.00 | 33.76 | 2.47 | 186 | 200 | 8.59 | 34.14 | 1.75 | 26.53 | 151 | 0.44 |
| 148 | 8.98 | 33.99 | 1.83 | 168 | 250 | 8.08 | 34.21 | 0.98 | 26.66 | 139 | 0.52 |
| 194 | 8.64 | 34.12 | 1.79 | 153 | 300 | 7.59 | 34.22 | 0.87 | 26.74 | 131 | 0.59 |
| 239 | 8.22 | 34.21 | 1.03 | 141 | 400 | 6.87 | 34.29 | 0.60 | 26.90 | 116 | 0.71 |
| 286 | 7.68 | 34.21 | 0.91 | 133 | 500 | 6.02 | 34.32 | 0.37 | 27.03 | 103 | 0.83 |
| 384 | 7.02 | 34.28 | 0.65 | 119 | 600 | (5.55) | (34.34) | | (27.11) | (96) | (0.94) |
| 479 | 6.15 | 34.32 | 0.39 | 105 | | | | | | | |
| 583 | 5.62 | 34.34 | 0.28 | 97 | | | | | | | |

BLACK DOUGLAS; November 11, 1952; 1017 GCT; 32°04.5'N, 120°39'W; sounding, 2060 fm; wind, 340°, force 2; weather, partly cloudy; sea, moderate; wire angle, 11°. 90.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.34 | 33.41 | 4.41 | 370 | 0 | 17.34 | 33.41 | 4.41 | 24.24 | 370 | 0.00 |
| 9 | 17.30 | 33.40 | 4.43 | 369 | 10 | 17.30 | 33.40 | 4.45 | 24.24 | 369 | 0.04 |
| 24 | 17.32 | 33.45 | 4.42 | 366 | 20 | 17.30 | 33.45 | 4.44 | 24.28 | 366 | 0.07 |
| 48 | 13.66 | 33.41 | 4.79 | 292 | 30 | 17.32 | 33.44 | 4.49 | 24.26 | 367 | 0.11 |
| 73 | 9.82 | 33.67 | 2.68 | 205 | 50 | 12.50 | 33.41 | 4.77 | 25.28 | 270 | 0.17 |
| 96 | 8.92 | 33.76 | 2.52 | 184 | 75 | 9.65 | 33.68 | 2.65 | 26.00 | 201 | 0.23 |
| 146 | 8.53 | 33.99 | 2.19 | 162 | 100 | 8.89 | 33.78 | 2.49 | 26.20 | 182 | 0.28 |
| 191 | 7.98 | 34.06 | 1.74 | 148 | 150 | 8.49 | 33.99 | 2.14 | 26.43 | 161 | 0.37 |
| 236 | 7.62 | 34.13 | 1.41 | 138 | 200 | 7.90 | 34.07 | 1.68 | 26.58 | 147 | 0.45 |
| 281 | 7.32 | 34.19 | 0.98 | 130 | 250 | 7.53 | 34.15 | 1.24 | 26.70 | 135 | 0.52 |
| 377 | 6.58 | 34.23 | 0.65 | 117 | 300 | 7.17 | 34.19 | 0.90 | 26.78 | 128 | 0.59 |
| 466 | 6.16 | 34.34 | 0.29 | 104 | 400 | 6.47 | 34.26 | 0.54 | 26.93 | 113 | 0.71 |
| 561 | 5.56 | 34.40 | 0.23 | 92 | 500 | 5.93 | 34.36 | 0.28 | 27.08 | 99 | 0.83 |
| 746 | 4.74 | 34.45 | 0.29 | 79 | 600 | 5.33 | 34.41 | 0.27 | 27.19 | 89 | 0.93 |
| 934 | 4.15 | 34.51 | 0.43 | 69 | 700 | 4.91 | 34.44 | 0.29 | 27.26 | 82 | 1.02 |
| 1134 | 3.52 | 34.54 | 0.58 | 60 | 800 | 4.57 | 34.47 | 0.36 | 27.33 | 76 | 1.11 |
| | | | | | 1000 | 3.95 | 34.52 | 0.47 | 27.43 | 66 | 1.26 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 93.27 BLACK DOUGLAS; November 9, 1952; 1416 GCT; 32°56'N, 117°19'W; sounding, 100 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | |
| 0 | 15.88 | 33.26 | 4.84 | 348 | 0 | 15.88 | 33.26 | 4.84 | 24.46 | 348 | 0.00 |
| 10 | 15.20 | 33.24 | 4.86 | 335 | 10 | 15.20 | 33.24 | 4.86 | 24.59 | 335 | 0.03 |
| 20 | 14.80 | 33.25 | 4.96 | 326 | 20 | 14.80 | 33.25 | 4.96 | 24.69 | 326 | 0.07 |
| 30 | 13.74 | 33.27 | 4.96 | 304 | 30 | 13.74 | 33.27 | 4.96 | 24.93 | 304 | 0.10 |
| 50 | 12.18 | 33.29 | 3.99 | 273 | 50 | 12.18 | 33.29 | 3.99 | 25.25 | 273 | 0.16 |
| 74 | 11.64 | 33.33 | 3.76 | 260 | 75 | 11.60 | 33.34 | 3.75 | 25.40 | 259 | 0.22 |
| 98 | 10.99 | 33.42 | 3.29 | 243 | 100 | 10.92 | 33.42 | 3.26 | 25.58 | 241 | 0.29 |
| 122 | 10.61 | 33.46 | 3.08 | 233 | | | | | | | |
| 93.30 BLACK DOUGLAS; November 9, 1952; 1030 GCT; 32°50'N, 117°31.5'W; sounding, 460 fm; wind, 280°, force 1; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | |
| 0 | 17.47 | 33.37 | 4.48 | 375 | 0 | 17.47 | 33.37 | 4.48 | 24.17 | 375 | 0.00 |
| 10 | 17.30 | 33.39 | 4.54 | 370 | 10 | 17.30 | 33.39 | 4.54 | 24.23 | 370 | 0.04 |
| 20 | 13.30 | 33.30 | 4.81 | 293 | 20 | 13.30 | 33.30 | 4.81 | 25.04 | 293 | 0.07 |
| 35 | 11.98 | 33.30 | 3.96 | 269 | 30 | 12.30 | 33.30 | 4.30 | 25.23 | 274 | 0.10 |
| 50 | 11.49 | 33.31 | 3.66 | 259 | 50 | 11.49 | 33.31 | 3.66 | 25.39 | 259 | 0.15 |
| 64 | 11.38 | 33.37 | 3.56 | 253 | 75 | 11.12 | 33.39 | 3.42 | 25.52 | 247 | 0.22 |
| 78 | 11.10 | 33.39 | 3.40 | 247 | 100 | 10.91 | 33.41 | 3.28 | 25.57 | 242 | 0.28 |
| 97 | 10.96 | 33.41 | 3.34 | 243 | 150 | 9.93 | 33.75 | 2.38 | 26.01 | 201 | 0.39 |
| 121 | 10.26 | 33.56 | 2.83 | 220 | 200 | 9.52 | 34.07 | 1.72 | 26.33 | 171 | 0.48 |
| 149 | 9.93 | 33.74 | 2.39 | 201 | 250 | 8.99 | 34.21 | 1.29 | 26.52 | 152 | 0.57 |
| 195 | 9.56 | 34.04 | 1.78 | 173 | 300 | 8.25 | 34.19 | 1.15 | 26.62 | 143 | 0.64 |
| 242 | 9.14 | 34.21 | 1.29 | 154 | 400 | 7.51 | 34.31 | 0.62 | 26.82 | 123 | 0.78 |
| 288 | 8.37 | 34.19 | 1.22 | 144 | 500 | 6.73 | 34.36 | 0.33 | 26.97 | 109 | 0.91 |
| 388 | 7.60 | 34.30 | 0.65 | 125 | 600 | (5.83) | (34.39) | | (27.11) | (96) | (1.02) |
| 484 | 6.89 | 34.35 | 0.37 | 112 | | | | | | | |
| 588 | 5.96 | 34.39 | 0.18 | 97 | | | | | | | |
| 93.40 BLACK DOUGLAS; November 9, 1952; 0427 GCT; 32°30'N, 118°12.5'W; sounding, 1200 fm; wind, 300°, force 1; weather, clear; sea, missing; wire angle, 00°. | | | | | | | | | | | |
| 0 | 16.42 | 33.18 | 4.36 | 366 | 0 | 16.42 | 33.18 | 4.36 | 24.27 | 366 | 0.00 |
| 10 | 16.34 | 33.22 | 4.42 | 361 | 10 | 16.34 | 33.22 | 4.42 | 24.32 | 361 | 0.04 |
| 20 | 15.30 | 33.26 | 4.76 | 336 | 20 | 15.30 | 33.26 | 4.76 | 24.59 | 336 | 0.07 |
| 35 | 14.20 | 33.23 | 4.79 | 316 | 30 | 14.65 | 33.25 | 4.80 | 24.72 | 323 | 0.10 |
| 50 | 12.38 | 33.14 | 4.53 | 288 | 50 | 12.38 | 33.14 | 4.53 | 25.09 | 288 | 0.17 |
| 64 | 11.30 | 33.15 | 4.33 | 268 | 75 | 10.50 | 33.23 | 3.90 | 25.51 | 248 | 0.23 |
| 79 | 10.32 | 33.29 | 3.73 | 241 | 100 | 9.49 | 33.47 | 3.18 | 25.86 | 215 | 0.29 |
| 98 | 9.52 | 33.45 | 3.19 | 216 | 150 | 8.64 | 33.86 | 2.61 | 26.30 | 173 | 0.39 |
| 122 | 9.04 | 33.66 | 2.89 | 194 | 200 | 8.30 | 34.04 | 2.12 | 26.50 | 154 | 0.47 |
| 150 | 8.64 | 33.86 | 2.61 | 173 | 250 | 7.72 | 34.11 | 1.75 | 26.64 | 141 | 0.55 |
| 196 | 8.34 | 34.04 | 2.15 | 155 | 300 | 7.32 | 34.20 | 1.43 | 26.77 | 129 | 0.62 |
| 242 | 7.80 | 34.09 | 1.80 | 144 | 400 | 6.71 | 34.32 | 0.73 | 26.94 | 112 | 0.74 |
| 289 | 7.40 | 34.19 | 1.53 | 131 | 500 | 6.15 | 34.45 | 0.35 | 27.12 | 95 | 0.85 |
| 388 | 6.78 | 34.29 | 0.80 | 115 | 600 | (5.59) | (34.40) | | (27.15) | (92) | (0.95) |
| 484 | 6.24 | 34.45 | 0.39 | 96 | | | | | | | |
| 588 | 5.67 | 34.41 | 0.23 | 93 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

BLACK DOUGLAS; November 8, 1952; 2218 GCT; 32°10'N, 118°53.5'W; sounding, 840 fm; wind, 300°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. 93.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.80 | 33.09 | 4.47 | 381 | 0 | 16.80 | 33.09 | 4.47 | 24.12 | 381 | 0.00 |
| 10 | 16.46 | 33.09 | 4.34 | 373 | 10 | 16.46 | 33.09 | 4.34 | 24.20 | 373 | 0.04 |
| 20 | 16.41 | 33.15 | 4.41 | 368 | 20 | 16.41 | 33.15 | 4.41 | 24.25 | 368 | 0.07 |
| 35 | 15.45 | 33.08 | 4.56 | 352 | 30 | 16.25 | 33.11 | 4.51 | 24.26 | 367 | 0.11 |
| 50 | 14.44 | 33.06 | 4.59 | 333 | 50 | 14.44 | 33.06 | 4.59 | 24.62 | 333 | 0.18 |
| 64 | 13.38 | 33.14 | 4.49 | 306 | 75 | 11.45 | 33.01 | 4.25 | 25.17 | 281 | 0.26 |
| 79 | 11.25 | 33.00 | 4.08 | 278 | 100 | 10.50 | 33.23 | 3.40 | 25.51 | 248 | 0.33 |
| 98 | 10.60 | 33.22 | 3.43 | 251 | 150 | 9.68 | 33.80 | 2.40 | 26.09 | 193 | 0.44 |
| 122 | 9.79 | 33.44 | 2.93 | 221 | 200 | 8.47 | 33.88 | 2.29 | 26.35 | 169 | 0.53 |
| 150 | 9.68 | 33.80 | 2.40 | 193 | 250 | 7.94 | 34.04 | 1.87 | 26.55 | 149 | 0.61 |
| 197 | 8.50 | 33.87 | 2.31 | 170 | 300 | 7.43 | 34.11 | 1.09 | 26.68 | 137 | 0.68 |
| 242 | 8.06 | 34.03 | 1.94 | 152 | 400 | 6.84 | 34.24 | 0.58 | 26.86 | 120 | 0.82 |
| 288 | 7.52 | 34.09 | 1.16 | 140 | 500 | 6.28 | 34.32 | 0.32 | 27.00 | 107 | 0.94 |
| 385 | 6.93 | 34.23 | 0.62 | 122 | 600 | (5.59) | (34.34) | | (27.10) | (97) | (1.05) |
| 481 | 6.40 | 34.31 | 0.33 | 109 | | | | | | | |
| 584 | 5.70 | 34.34 | 0.23 | 98 | | | | | | | |

BLACK DOUGLAS; November 8, 1952; 0130 GCT; 32°15.5'N, 117°09'W; sounding, 23 fm; wind, 150°, force 2; weather, cloudy; sea, slight; wire angle, 00°. 97.30

| | | | | |
|---|---|---|---|---|
| 0 | 17.28 | 33.23 | 4.47 | 381 |
| 10 | 17.26 | 33.43 | 4.27 | 366 |
| 30 | 17.66u | 33.35 | 4.18 | |

BLACK DOUGLAS; November 8, 1952; 0336 GCT; 32°11.5'N, 117°17'W; sounding, 730 fm; wind, missing; weather, partly cloudy; sea, slight; wire angle, 04°. 97.32

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.05 | 33.43 | 4.34 | 384 | 0 | 18.05 | 33.43 | 4.34 | 24.08 | 384 | 0.00 |
| 10 | 18.03 | 33.44 | 4.43 | 383 | 10 | 18.03 | 33.44 | 4.43 | 24.09 | 383 | 0.04 |
| 20 | 17.96 | 33.33 | 4.30 | 390 | 20 | 17.96 | 33.33 | 4.30 | 24.02 | 390 | 0.08 |
| 35 | 15.76 | 33.26 | 4.77 | 346 | 30 | 17.75 | 33.29 | 4.61 | 24.05 | 388 | 0.12 |
| 51 | 12.70 | 33.18 | 4.44 | 291 | 50 | 12.80 | 33.18 | 4.48 | 25.04 | 292 | 0.18 |
| 64 | 11.23 | 33.24 | 4.27 | 260 | 75 | 10.55 | 33.33 | 3.70 | 25.58 | 242 | 0.25 |
| 79 | 10.42 | 33.36 | 3.35 | 238 | 100 | 10.10 | 33.57 | 2.62 | 25.84 | 217 | 0.31 |
| 98 | 10.10 | 33.56 | 2.65 | 218 | 150 | 9.91 | 33.86 | 2.00 | 26.10 | 192 | 0.41 |
| 120 | 10.00 | 33.65 | 2.59 | 209 | 200 | 9.63 | 34.16 | 1.21 | 26.38 | 166 | 0.50 |
| 148 | 9.92 | 33.85 | 2.03 | 193 | 250 | 9.25 | 34.23 | 1.13 | 26.50 | 155 | 0.59 |
| 193 | 9.70 | 34.13 | 1.23 | 169 | 300 | 8.82 | 34.21 | 0.93 | 26.55 | 149 | 0.66 |
| 239 | 9.32 | 34.23 | 1.18 | 156 | 400 | 7.42 | 34.21 | 0.63 | 26.76 | 130 | 0.81 |
| 284 | 9.00 | 34.22 | 1.00 | 151 | 500 | 6.68 | 34.34 | 0.39 | 26.96 | 110 | 0.94 |
| 383 | 7.58 | 34.19 | 0.67 | 133 | | | | | | | |
| 477 | 6.84 | 34.32 | 0.42 | 114 | | | | | | | |
| 579 | 6.13 | 34.39 | 0.23 | 99 | | | | | | | |

BLACK DOUGLAS; November 8, 1952; 0911 GCT; 31°55.5'N, 117°50'W; sounding, 520 fm; wind, 250°, force 1; weather, cloudy; sea, very rough; wire angle, 00°. 97.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.35 | 33.41 | 4.45 | 370 | 0 | 17.35 | 33.41 | 4.45 | 24.23 | 370 | 0.00 |
| 10 | 17.32 | 33.44 | 4.49 | 367 | 10 | 17.32 | 33.44 | 4.49 | 24.26 | 367 | 0.04 |
| 20 | 15.68 | 33.40 | 4.89 | 334 | 20 | 15.68 | 33.40 | 4.89 | 24.61 | 334 | 0.07 |
| 35 | 11.80 | 33.31 | 4.68 | 265 | 30 | 12.80 | 33.33 | 4.80 | 25.16 | 281 | 0.10 |
| 50 | 10.75 | 33.39 | 3.45 | 241 | 50 | 10.75 | 33.39 | 3.45 | 25.59 | 241 | 0.16 |
| 64 | 10.28 | 33.52 | 3.13 | 223 | 75 | 10.00 | 33.60 | 2.90 | 25.88 | 213 | 0.21 |
| 79 | 9.87 | 33.62 | 2.83 | 209 | 100 | 9.34 | 33.76 | 2.54 | 26.11 | 191 | 0.26 |
| 98 | 9.36 | 33.75 | 2.55 | 192 | 150 | 9.02 | 34.09 | 1.85 | 26.42 | 161 | 0.35 |
| 122 | 9.18 | 33.84 | 2.37 | 182 | 200 | 8.60 | 34.15 | 1.47 | 26.54 | 151 | 0.43 |
| 151 | 9.02 | 34.09 | 1.83 | 161 | 250 | 8.69 | 34.32 | 0.92 | 26.66 | 139 | 0.51 |
| 197 | 8.60 | 34.14 | 1.50 | 151 | 300 | 8.25 | 34.36 | 0.67 | 26.75 | 130 | 0.58 |
| 243 | 8.69 | 34.30 | 0.98 | 141 | 400 | 7.11 | 34.33 | 0.48 | 26.90 | 116 | 0.71 |
| 290 | 8.37 | 34.37 | 0.69 | 131 | 500 | 6.36 | (34.38) | (0.26) | (27.04) | (103) | (0.82) |
| 389 | 7.22 | 34.32 | 0.51 | 119 | 600 | (5.82) | | | | | |
| 484 | 6.47 | 34.38 | 0.26 | 104 | | | | | | | |
| 586 | 5.89 | - | - | | | | | | | | |

SIO

CCOFI
5211

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | $\Delta D$<br>dyn m |
| 97.50 | BLACK DOUGLAS; November 8, 1952; 1529, 1549 GCT; 31°35.5'N, 118°30.5'W; sounding, 1280 fm; wind, 250°, force 1; weather, partly cloudy; sea, moderate; wire angle, 01°, 01°. | | | | | | | | | | |
| 0 | 17.24 | 33.45 | 4.33 | 364 | 0 | 17.24 | 33.45 | 4.33 | 24.29 | 364 | 0.00 |
| 10 | 17.22 | 33.40 | 4.39 | 368 | 10 | 17.22 | 33.40 | 4.39 | 24.26 | 368 | 0.04 |
| 20 | 17.22 | 33.39 | 4.33 | 368 | 20 | 17.22 | 33.39 | 4.33 | 24.25 | 368 | 0.07 |
| 35 | 16.52 | 33.34 | 4.53 | 356 | 30 | 17.12 | 33.38 | 4.45 | 24.26 | 367 | 0.11 |
| 50 | 12.87 | 33.15 | 4.70 | 296 | 50 | 12.87 | 33.15 | 4.70 | 25.01 | 296 | 0.18 |
| 64 | 11.42 | 33.30 | 3.96 | 259 | 75 | 10.65 | 33.36 | 3.70 | 25.58 | 241 | 0.24 |
| | | | | | 100 | 10.11 | 33.57 | 2.52 | 25.84 | 217 | 0.30 |
| 78 | 10.58 | 33.37 | 3.62 | 239 | 150 | 9.96 | 34.03 | 1.43 | 26.22 | 180 | 0.40 |
| 98 | 10.12 | 33.55 | 2.58 | 219 | 200 | 9.90 | 34.20 | 1.04 | 26.36 | 167 | 0.49 |
| 122 | 10.02 | 33.79 | 1.97 | 199 | 250 | 9.55 | 34.23 | 0.85 | 26.45 | 159 | 0.58 |
| 150 | 9.96 | 34.03 | 1.43 | 180 | 300 | 8.69 | 34.22 | 0.95 | 26.58 | 147 | 0.65 |
| 196 | 9.93 | 34.19 | 1.07 | 168 | 400 | 7.68 | 34.25 | 0.62 | 26.75 | 130 | 0.80 |
| 242 | 9.64 | 34.23 | 0.84 | 161 | 500 | 6.89 | 34.28 | 0.34 | 26.89 | 117 | 0.93 |
| 288 | 8.82 | 34.22 | 0.99 | 149 | 600 | (6.23) | (34.31) | | (27.00) | (107) | (1.05) |
| 387 | 7.80 | 34.25 | 0.68 | 132 | | | | | | | |
| 482 | 7.00 | 34.27 | 0.39 | 119 | | | | | | | |
| 586 | 6.32 | 34.31 | 0.24 | 108 | | | | | | | |
| 100.29 | CREST; November 6, 1952; 0410 GCT; 31°42'N, 116°44.5'W; sounding, 150 fm; wind, 300°, force 1; weather, clear; sea, calm; wire angle, 08°. | | | | | | | | | | |
| 0 | 17.91 | 33.37 | 5.76 | 385 | 0 | 17.91 | 33.37 | 5.76 | 24.07 | 385 | 0.00 |
| 10 | 15.63 | 33.26 | 6.31 | 343 | 10 | 15.63 | 33.26 | 6.31 | 24.51 | 343 | 0.04 |
| 19 | 12.78 | 33.23 | 6.19 | 288 | 20 | 12.60 | 33.23 | 6.09 | 25.12 | 285 | 0.07 |
| 29 | 11.95 | 33.25 | 5.45 | 272 | 30 | 11.88 | 33.27 | 5.41 | 25.29 | 269 | 0.10 |
| 50 | 11.32 | 33.33 | 5.16 | 255 | 50 | 11.32 | 33.33 | 5.16 | 25.44 | 255 | 0.15 |
| 74 | 10.90 | 33.32 | 4.80 | 248 | 75 | 10.87 | 33.32 | 4.74 | 25.51 | 248 | 0.21 |
| 99 | 10.44 | 33.58 | 3.55 | 222 | 100 | (10.43) | (33.59) | (3.51) | (25.80) | (221) | (0.27) |
| 100.30 | CREST; November 6, 1952; 0510 GCT; 31°40'N, 116°47'W; sounding, 250 fm; wind, 300°, force 1; weather, partly cloudy; sea, calm; wire angle, 08°. | | | | | | | | | | |
| 0 | 17.86 | 33.39 | 5.75 | 383 | 0 | 17.86 | 33.39 | 5.75 | 24.10 | 383 | 0.00 |
| 10 | 17.83 | 33.39 | 5.81 | 382 | 10 | 17.83 | 33.39 | 5.81 | 24.10 | 382 | 0.04 |
| 25 | 16.96 | 33.37 | 5.95 | 364 | 20 | 17.79 | 33.38 | 5.91 | 24.10 | 382 | 0.08 |
| 50 | 12.88 | 33.19 | 5.85 | 293 | 30 | 14.67 | 33.34 | 5.96 | 24.78 | 317 | 0.11 |
| 74 | 11.66 | 33.23 | 5.12 | 268 | 50 | 12.88 | 33.19 | 5.85 | 25.04 | 293 | 0.17 |
| 98 | 10.54 | 33.54 | 3.92 | 226 | 75 | 11.61 | 33.23 | 5.09 | 25.31 | 267 | 0.24 |
| 147 | 9.70 | 33.92 | 2.28 | 184 | 100 | 10.50 | 33.56 | 3.65 | 25.76 | 224 | 0.31 |
| 192 | 9.64 | 34.10 | 1.94 | 170 | 150 | 9.78 | 33.94 | 2.24 | 26.18 | 184 | 0.41 |
| 238 | 9.37 | 34.20 | 1.51 | 159 | 200 | 9.61 | 34.11 | 1.88 | 26.34 | 169 | 0.50 |
| 287 | 8.66 | 34.26 | 1.19 | 143 | 250 | 9.16 | 34.22 | 1.40 | 26.50 | 154 | 0.58 |
| 100.40 | CREST; November 6, 1952; 1013 GCT; 31°21'N, 117°27'W; sounding, 1000 fm; wind, 280°, force 1; weather, clear; sea, calm; wire angle, 11°. | | | | | | | | | | |
| 0 | 17.77 | 33.37 | 5.90 | 382 | 0 | 17.77 | 33.37 | 5.90 | 24.10 | 382 | 0.00 |
| 10 | 17.72 | 33.41 | 5.84 | 378 | 10 | 17.72 | 33.41 | 5.84 | 24.14 | 378 | 0.04 |
| 25 | 15.66 | 33.24 | 6.43 | 345 | 20 | 17.60 | 33.41 | 6.34 | 24.17 | 375 | 0.08 |
| 49 | 12.40 | 33.22 | 5.98 | 282 | 30 | 14.80 | 33.23 | 6.42 | 24.67 | 328 | 0.11 |
| 73 | 10.27 | 33.31 | 4.64 | 239 | 50 | 12.08 | 33.22 | 5.89 | 25.21 | 276 | 0.17 |
| 97 | 9.89 | 33.48 | 3.96 | 220 | 75 | 10.22 | 33.31 | 4.60 | 25.62 | 238 | 0.24 |
| 150 | 8.82 | 33.90 | 3.24 | 172 | 100 | 9.78 | 33.50 | 3.89 | 25.84 | 217 | 0.29 |
| 196 | 8.79 | 34.11 | 2.23 | 156 | 150 | 8.82 | 33.90 | 3.24 | 26.31 | 172 | 0.39 |
| 242 | 8.42 | 34.19 | 1.53 | 145 | 200 | 8.74 | 34.12 | 2.13 | 26.49 | 155 | 0.48 |
| 260 | 8.52 | 34.30 | 1.10 | 138 | 250 | 8.44 | 34.25 | 1.37 | 26.64 | 141 | 0.55 |
| 384 | 7.24 | 34.28 | 0.62 | 122 | 300 | 8.17 | 34.30 | 0.84 | 26.72 | 133 | 0.62 |
| 474 | 6.54 | 34.32 | 0.37 | 110 | 400 | 7.14 | 34.29 | 0.59 | 26.86 | 120 | 0.75 |
| 571 | 5.84 | 34.34 | 0.28 | 100 | 500 | 6.35 | 34.32 | 0.34 | 26.99 | 107 | 0.88 |
| 664 | 5.36 | 34.43 | 0.27 | 87 | 600 | 5.72 | 34.37 | 0.26 | 27.11 | 96 | 0.98 |
| 763 | 4.78 | 34.49 | 0.34 | 77 | 700 | 5.15 | 34.45 | 0.29 | 27.24 | 84 | 1.08 |
| 860 | 4.42 | 34.52 | 0.40 | 70 | 800 | 4.64 | 34.50 | 0.37 | 27.34 | 74 | 1.17 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; November 6, 1952; 1522 GCT; 31°01'N, 118°06'W; sounding, 960 fm; wind, 320°, force 3; weather, partly cloudy; sea, smooth; wire angle, 00°. | | | | | | | | | | | 100.50 |
| 0 | 16.37 | 33.34 | 5.91 | 353 | 0 | 16.37 | 33.34 | 5.91 | 24.41 | 353 | 0.00 |
| 10 | 16.38 | 33.35 | 5.96 | 353 | 10 | 16.38 | 33.35 | 5.96 | 24.41 | 353 | 0.04 |
| 20 | 16.36 | 33.31 | 5.96 | 355 | 20 | 16.36 | 33.31 | 5.96 | 24.39 | 355 | 0.07 |
| 35 | 13.42 | 33.15 | 6.45 | 306 | 30 | 16.10 | 33.18 | 6.20 | 24.35 | 359 | 0.11 |
| 50 | 12.30 | 33.16 | 5.93 | 285 | 50 | 12.30 | 33.16 | 5.93 | 25.13 | 285 | 0.17 |
| 65 | 11.38 | 33.27 | 5.32 | 260 | 75 | 10.58 | 33.42 | 4.55 | 25.64 | 236 | 0.24 |
| 79 | 10.44 | 33.45 | 4.37 | 231 | 100 | 10.13 | 33.57 | 3.70 | 25.83 | 217 | 0.29 |
| 98 | 10.18 | 33.56 | 3.78 | 219 | 150 | 9.90 | 34.04 | 1.95 | 26.24 | 179 | 0.39 |
| 122 | 9.90 | 33.79 | 2.95 | 197 | 200 | 8.96 | 33.99 | 2.63 | 26.35 | 168 | 0.48 |
| 150 | 9.90 | 34.04 | 1.95 | 179 | 250 | 9.23 | 34.28 | 1.45 | 26.54 | 151 | 0.56 |
| 197 | 8.98 | 33.99 | 2.64 | 168 | 300 | 8.49 | 34.24 | 1.32 | 26.62 | 142 | 0.64 |
| 244 | 9.24 | 34.28 | 1.49 | 151 | 400 | 7.38 | 34.19 | 0.93 | 26.75 | 130 | 0.78 |
| 290 | 8.60 | 34.24 | 1.33 | 144 | 500 | 6.65 | 34.32 | 0.42 | 26.95 | 111 | 0.91 |
| 390 | 7.45 | 34.19 | 0.97 | 131 | 600 | (5.88) | (34.31) | | (27.04) | (102) | (1.02) |
| 485 | 6.77 | 34.32 | 0.48 | 113 | | | | | | | |
| 588 | 5.97 | 34.31 | 0.26 | 104 | | | | | | | |
| CREST; November 6, 1952; 2005 GCT; 30°41'N, 118°47'W; sounding, 1600 fm; wind, 280°, force 2; weather, cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | | 100.60 |
| 0 | 17.40 | 33.32 | 5.83 | 377 | 0 | 17.40 | 33.32 | 5.83 | 24.15 | 377 | 0.00 |
| 10 | 17.08 | 33.34 | 5.88 | 369 | 10 | 17.08 | 33.34 | 5.88 | 24.24 | 369 | 0.04 |
| 25 | 16.39 | 33.32 | 6.09 | 355 | 20 | 16.64 | 33.34 | 6.05 | 24.35 | 359 | 0.07 |
| 50 | 12.54 | 33.19 | 6.05 | 287 | 30 | 15.70 | 33.30 | 6.12 | 24.53 | 342 | 0.11 |
| 74 | 10.96 | 33.35 | 4.75 | 247 | 50 | 12.54 | 33.19 | 6.05 | 25.10 | 287 | 0.17 |
| 98 | 9.96 | 33.55 | 3.74 | 216 | 75 | 10.85 | 33.35 | 4.74 | 25.54 | 245 | 0.24 |
| 149 | 9.85 | 34.01 | 2.30 | 180 | 100 | 9.93 | 33.60 | 3.55 | 25.89 | 212 | 0.30 |
| 194 | 9.47 | 34.16 | 1.89 | 163 | 150 | 9.84 | 34.02 | 2.29 | 26.23 | 179 | 0.40 |
| 240 | 9.18 | 34.26 | 1.39 | 151 | 200 | 9.43 | 34.18 | 1.81 | 26.43 | 161 | 0.48 |
| 284 | 8.72 | 34.28 | 1.33 | 143 | 250 | 9.08 | 34.26 | 1.37 | 26.55 | 150 | 0.56 |
| 382 | 7.38 | 34.30 | 0.88 | 122 | 300 | 8.49 | 34.28 | 1.28 | 26.66 | 139 | 0.64 |
| 476 | 6.62 | 34.26 | 0.42 | 115 | 400 | 7.25 | 34.30 | 0.76 | 26.85 | 121 | 0.77 |
| 576 | 5.75 | 34.32 | 0.33 | 100 | 500 | 6.40 | 34.27 | 0.40 | 26.95 | 112 | 0.90 |
| 670 | 5.26 | 34.43 | 0.32 | 86 | 600 | 5.63 | 34.36 | 0.32 | 27.11 | 96 | 1.01 |
| 770 | 4.82 | 34.40 | 0.37 | 84 | 700 | 5.14 | 34.43 | 0.32 | 27.23 | 85 | 1.10 |
| 968 | 4.12 | 34.40 | 0.55 | 76 | 800 | 4.72 | 34.40 | 0.37 | 27.25 | 83 | 1.20 |
| | | | | | 1000 | (4.02) | (34.40) | (0.63) | (27.33) | (75) | (1.37) |
| CREST; November 7, 1952; 0105 GCT; 30°20.5'N, 119°27'W; sounding, 2000 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 06°. | | | | | | | | | | | 100.70 |
| 0 | 18.35 | 33.36 | 5.66 | 396 | 0 | 18.35 | 33.36 | 5.66 | 23.95 | 396 | 0.00 |
| 10 | 18.36 | 33.28 | 5.81 | 403 | 10 | 18.36 | 33.28 | 5.81 | 23.89 | 403 | 0.04 |
| 20 | 18.31 | 33.36 | 5.86 | 396 | 20 | 18.31 | 33.36 | 5.86 | 23.96 | 396 | 0.08 |
| 35 | 18.36 | 33.39 | 5.76 | 395 | 30 | 18.34 | 33.38 | 5.80 | 23.97 | 395 | 0.12 |
| 50 | 16.63 | 33.27 | 6.27 | 364 | 50 | 16.63 | 33.27 | 6.27 | 24.29 | 364 | 0.20 |
| 64 | 14.80 | 33.18 | 6.43 | 332 | 75 | 13.90 | 33.19 | 6.37 | 24.83 | 313 | 0.28 |
| 78 | 13.72 | 33.19 | 6.37 | 309 | 100 | 12.59 | 33.20 | 6.10 | 25.10 | 287 | 0.36 |
| 97 | 12.78 | 33.20 | 6.35 | 291 | 150 | 9.42 | 33.57 | 4.35 | 25.95 | 206 | 0.48 |
| 119 | 11.27 | 33.37 | 5.35 | 251 | 200 | 8.57 | 33.91 | 3.44 | 26.35 | 168 | 0.58 |
| 146 | 9.50 | 33.52 | 4.49 | 211 | 250 | 7.94 | 34.02 | 3.08 | 26.53 | 151 | 0.66 |
| 191 | 8.66 | 33.89 | 3.47 | 171 | 300 | 7.35 | 34.09 | 2.01 | 26.67 | 138 | 0.73 |
| 238 | 8.13 | 34.00 | 3.31 | 155 | 400 | 6.58 | 34.16 | 1.07 | 26.84 | 122 | 0.87 |
| 284 | 7.46 | 34.08 | 2.30 | 140 | 500 | 5.92 | 34.24 | 0.64 | 26.98 | 108 | 0.99 |
| 382 | 6.72 | 34.14 | 1.16 | 126 | | | | | | | |
| 476 | 6.05 | 34.22 | 0.72 | 111 | | | | | | | |
| 579 | 5.52 | 34.31 | 0.39 | 98 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 100.80 | CREST; November 7, 1952; 0552 GCT; 30°01'N, 120°06.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | 18.29 | - | - | | 0 | 18.29 | (33.27) | | (23.90) | (402) | (0.00) |
| 10 | 18.31 | 33.27 | 5.64 | 402 | 10 | 18.31 | 33.27 | 5.64 | 23.89 | 402 | 0.04 |
| 24 | 18.48 | 33.28 | 5.59 | 405 | 20 | 18.42 | 33.28 | 5.61 | 23.87 | 404 | 0.08 |
| 48 | 16.78 | 33.09 | 6.10 | 380 | 30 | 18.42 | 33.28 | 5.58 | 23.87 | 404 | 0.12 |
| 72 | 14.18 | 33.05 | 6.35 | 329 | 50 | 16.27 | 33.08 | 6.16 | 24.23 | 370 | 0.20 |
| 95 | 13.44 | 33.43 | 5.84 | 286 | 75 | 14.20 | 33.16 | 6.35 | 24.75 | 321 | 0.29 |
| 145 | 9.92 | 33.37 | 4.83 | 229 | 100 | 13.14 | 33.43 | 5.69 | 25.17 | 280 | 0.36 |
| 192 | 9.03 | 33.79 | 4.01 | 184 | 150 | 9.82 | 33.37 | 4.74 | 25.73 | 227 | 0.49 |
| 235 | 8.46 | 33.96 | 3.40 | 163 | 200 | 8.95 | 33.82 | 3.92 | 26.22 | 180 | 0.59 |
| 280 | 7.65 | 34.08 | 2.67 | 142 | 250 | 8.08 | 34.00 | 3.15 | 26.50 | 154 | 0.68 |
| 372 | 7.14 | 34.20 | 1.01 | 127 | 300 | 7.57 | 34.11 | 2.33 | 26.66 | 139 | 0.75 |
| 460 | 6.01 | 34.26 | 0.60 | 108 | 400 | 6.74 | 34.22 | 0.84 | 26.86 | 120 | 0.89 |
| 553 | 5.52 | 34.30 | 0.34 | 99 | 500 | 5.82 | 34.28 | 0.48 | 27.03 | 104 | 1.01 |
| 643 | 5.08 | 34.34 | 0.35 | 91 | 600 | 5.29 | 34.32 | 0.35 | 27.12 | 95 | 1.11 |
| 740 | 4.68 | 34.39 | 0.35 | 83 | 700 | 4.84 | 34.37 | 0.35 | 27.22 | 86 | 1.21 |
| 930 | 4.12 | 34.45 | 0.50 | 73 | 800 | 4.45 | 34.41 | 0.39 | 27.29 | 79 | 1.30 |
| | | | | | 1000 | (4.03) | (34.47) | | (27.38) | (70) | (1.47) |
| 103.30 | CREST; November 8, 1952; 0328 GCT; 31°05'N, 116°25'W; sounding, 40 fm; wind, 220°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 18.24 | 33.39 | 5.80 | 392 | 0 | 18.24 | 33.39 | 5.80 | 24.00 | 392 | 0.00 |
| 10 | 17.90 | 33.43 | 5.84 | 381 | 10 | 17.90 | 33.43 | 5.84 | 24.12 | 381 | 0.04 |
| 20 | 16.48 | 33.37 | 6.19 | 353 | 20 | 16.48 | 33.37 | 6.19 | 24.41 | 353 | 0.08 |
| 30 | 13.68 | 33.20 | 6.58 | 308 | 30 | 13.68 | 33.20 | 6.58 | 24.88 | 308 | 0.11 |
| 103.35 | CREST; November 8, 1952; 0049 GCT; 30°55.5'N, 116°45'W; sounding, 1020 fm; wind, 280°, force 2; weather, cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | 17.75 | 33.33 | 5.88 | 385 | 0 | 17.75 | 33.33 | 5.88 | 24.08 | 385 | 0.00 |
| 10 | 17.46 | 33.29 | 5.88 | 381 | 10 | 17.46 | 33.29 | 5.88 | 24.11 | 381 | 0.04 |
| 20 | 17.40 | 33.34 | 5.91 | 376 | 20 | 17.40 | 33.34 | 5.91 | 24.17 | 376 | 0.08 |
| 35 | 16.37 | 33.27 | 6.20 | 358 | 30 | 17.07 | 33.32 | 6.11 | 24.23 | 370 | 0.11 |
| 49 | 14.52 | 33.11 | 6.59 | 331 | 50 | 14.48 | 33.11 | 6.62 | 24.65 | 330 | 0.18 |
| 63 | 13.26 | 33.12 | 6.55 | 306 | 75 | 11.82 | 33.14 | 5.99 | 25.20 | 278 | 0.26 |
| 77 | 11.74 | 33.15 | 6.00 | 275 | 100 | 10.84 | 33.37 | 4.81 | 25.56 | 244 | 0.33 |
| 95 | 10.99 | 33.30 | 5.20 | 251 | 150 | 9.14 | 33.75 | 3.76 | 26.14 | 188 | 0.44 |
| 118 | 10.30 | 33.55 | 4.23 | 222 | 200 | 8.50 | 34.03 | 2.92 | 26.46 | 158 | 0.52 |
| 145 | 9.26 | 33.73 | 3.81 | 192 | 250 | 8.82 | 34.30 | 1.54 | 26.62 | 143 | 0.60 |
| 189 | 8.62 | 33.95 | 3.33 | 166 | 300 | 8.26 | 34.30 | 1.13 | 26.71 | 135 | 0.67 |
| 234 | 8.93 | 34.29 | 1.72 | 145 | 400 | 7.27 | 34.34 | 0.64 | 26.88 | 118 | 0.80 |
| 279 | 8.44 | 34.29 | 1.30 | 138 | 500 | 6.34 | 34.32 | 0.42 | 26.99 | 107 | 0.92 |
| 377 | 7.54 | 34.35 | 0.71 | 121 | | | | | | | |
| 471 | 6.55 | 34.31 | 0.47 | 111 | | | | | | | |
| 574 | 5.90 | 34.35 | 0.29 | 100 | | | | | | | |
| 103.40 | CREST; November 7, 1952; 2149, 2211 GCT; 30°45.5'N, 117°05.5'W; sounding, 850 fm; wind, 200°, force 3; weather, overcast; sea, smooth; wire angle, 16°, 15°. | | | | | | | | | | |
| 0 | 17.78 | 33.37 | 5.83 | 382 | 0 | 17.78 | 33.37 | 5.83 | 24.10 | 382 | 0.00 |
| 10 | 17.18 | 33.32 | 6.02 | 372 | 10 | 17.18 | 33.32 | 6.02 | 24.20 | 372 | 0.04 |
| 20 | 16.86 | 33.38 | 6.05 | 361 | 20 | 16.86 | 33.38 | 6.05 | 24.33 | 361 | 0.07 |
| 34 | 15.10 | 33.16 | 6.48 | 339 | 30 | 16.45 | 33.27 | 6.43 | 24.34 | 360 | 0.11 |
| 48 | 13.05 | 33.04 | 6.50 | 307 | | | | | | | |
| 135 | 9.38 | 33.87 | 3.12 | 183 | | | | | | | |
| 180 | 8.68 | 34.01 | 2.92 | 162 | 150 | 9.30 | 33.91 | 3.05 | 26.24 | 179 | 0.00a) |
| 225 | 8.92 | 34.23 | 1.60 | 149 | 200 | 8.79 | 34.13 | 2.29 | 26.49 | 155 | 0.09a) |
| 269 | 8.38 | 34.28 | 1.18 | 138 | 250 | 8.63 | 34.26 | 1.33 | 26.62 | 143 | 0.16a) |
| 365 | 7.47 | 34.33 | 0.67 | 121 | 300 | 8.08 | 34.30 | 0.96 | 26.73 | 132 | 0.24a) |
| 460 | 6.60 | 34.34 | 0.45 | 109 | 400 | 7.15 | 34.33 | 0.57 | 26.89 | 117 | 0.37a) |
| 561 | 5.80 | 34.39 | 0.35 | 96 | 500 | 6.27 | 34.36 | 0.38 | 27.03 | 103 | 0.48a) |

a) This value is calculated with respect to the 150-decibar surface rather than the sea surface.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

CREST; November 8, 1952; 0735 GCT; 30°25.5'N, 116°12'W; sounding, 550 fm; wind, 120°, force 2; weather, clear; sea, calm; wire angle, 00°. 107.32

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.04 | 33.29 | 6.33 | 350 | 0 | 16.04 | 33.29 | 6.33 | 24.45 | 350 | 0.00 |
| 10 | 15.44 | 33.29 | 6.50 | 337 | 10 | 15.44 | 33.29 | 6.50 | 24.58 | 337 | 0.03 |
| 25 | 14.60 | 33.30 | 6.47 | 319 | 20 | 14.92 | 33.30 | 6.49 | 24.70 | 325 | 0.07 |
| 50 | 12.94 | 33.27 | 5.37 | 288 | 30 | 14.20 | 33.30 | 6.42 | 24.85 | 311 | 0.10 |
| 74 | 12.12 | 33.37 | 4.64 | 266 | 50 | 12.94 | 33.27 | 5.37 | 25.09 | 288 | 0.16 |
| 98 | 11.64 | 33.49 | 3.75 | 249 | 75 | 12.10 | 33.37 | 4.61 | 25.33 | 266 | 0.23 |
| 148 | 11.24 | 33.93 | 1.89 | 209 | 100 | 11.62 | 33.50 | 3.50 | 25.52 | 248 | 0.29 |
| 194 | 10.88 | 34.21 | 1.43 | 182 | 150 | 11.23 | 33.95 | 1.85 | 25.94 | 208 | 0.41 |
| 242 | 10.01 | 34.29 | 1.40 | 162 | 200 | 10.80 | 34.23 | 1.43 | 26.23 | 180 | 0.51 |
| | | | | | 250 | (9.90) | (34.29) | (1.40) | (26.43) | (160) | (0.60) |

CREST; November 8, 1952; 0934 GCT; 30°20'N, 116°23'W; sounding, 900 fm; wind, 180°, force 3; weather, cloudy; sea, moderate; wire angle, 15°. 107.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.36 | 33.26 | 6.27 | 359 | 0 | 16.36 | 33.26 | 6.27 | 24.35 | 359 | 0.00 |
| 10 | 15.77 | 33.27 | 6.37 | 345 | 10 | 15.77 | 33.27 | 6.37 | 24.49 | 345 | 0.04 |
| 20 | 14.85 | 33.18 | 6.61 | 333 | 20 | 14.85 | 33.18 | 6.61 | 24.62 | 333 | 0.07 |
| 34 | 14.37 | 33.28 | 6.16 | 315 | 30 | 14.56 | 33.26 | 6.44 | 24.75 | 321 | 0.10 |
| 48 | 13.78 | 33.33 | 5.40 | 300 | 50 | 13.64 | 33.33 | 5.35 | 24.99 | 297 | 0.16 |
| 62 | 12.92 | 33.31 | 5.23 | 285 | 75 | 11.68 | 33.33 | 5.23 | 25.37 | 261 | 0.23 |
| 76 | 11.70 | 33.33 | 5.24 | 261 | 100 | 10.87 | 33.56 | 3.99 | 25.70 | 230 | 0.30 |
| 96 | 11.08 | 33.48 | 4.17 | 240 | 150 | 10.68 | 34.14 | 1.88 | 26.18 | 184 | 0.40 |
| 118 | 10.33 | 33.85 | 3.52 | 200 | 200 | 10.22 | 34.31 | 1.53 | 26.40 | 164 | 0.49 |
| 145 | 10.66 | 34.11 | 1.93 | 186 | 250 | 9.13 | 34.27 | 1.58 | 26.55 | 150 | 0.57 |
| 190 | 10.49 | 34.34 | 1.55 | 166 | 300 | 8.66 | 34.37 | 1.03 | 26.70 | 135 | 0.64 |
| 234 | 9.32 | 34.23 | 1.64 | 156 | 400 | 7.72 | 34.39 | 0.59 | 26.86 | 120 | 0.78 |
| 278 | 8.82 | 34.34 | 1.26 | 140 | 500 | 6.62 | (34.36) | | (26.99) | (108) | (0.90) |
| 373 | 8.06 | 34.39 | 0.66 | 125 | | | | | | | |
| 466 | 6.94 | 34.36 | 0.50 | 112 | | | | | | | |
| 567 | 6.08 | - | - | | | | | | | | |

CREST; November 8, 1952; 1232 GCT; 30°10'N, 116°43.5'W; sounding, 1450 fm; wind, 280°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°. 107.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.20 | 33.41 | 5.74 | 389 | 0 | 18.20 | 33.41 | 5.74 | 24.03 | 389 | 0.00 |
| 10 | 18.24 | 33.28u | 5.76 | | 10 | 18.24 | 33.41 | 5.76 | 24.02 | 390 | 0.04 |
| 20 | 17.89 | 33.40 | 5.80 | 383 | 20 | 17.89 | 33.40 | 5.80 | 24.10 | 383 | 0.08 |
| 35 | 17.39 | 33.27 | 5.84 | 381 | 30 | 17.41 | 33.27 | 5.83 | 24.11 | 381 | 0.12 |
| 50 | 15.54 | 33.17 | 6.38 | 348 | 50 | 15.54 | 33.17 | 6.38 | 24.46 | 348 | 0.19 |
| 64 | 13.42 | 33.15 | 6.48 | 306 | 75 | 12.84 | 33.20 | 6.24 | 25.05 | 292 | 0.27 |
| 78 | 12.72 | 33.21 | 6.13 | 289 | 100 | 10.93 | 33.22 | 5.58 | 25.42 | 256 | 0.34 |
| 97 | 11.21 | 33.22 | 5.66 | 261 | 150 | 9.82 | 33.73 | 3.35 | 26.01 | 200 | 0.45 |
| 120 | 10.18 | 33.36 | 4.90 | 234 | 200 | 8.56 | 33.94 | 3.34 | 26.38 | 166 | 0.55 |
| 148 | 9.88 | 33.72 | 3.39 | 202 | 250 | 8.03 | 34.04 | 2.78 | 26.54 | 151 | 0.63 |
| 194 | 8.62 | 33.94 | 3.37 | 167 | 300 | 7.46 | 34.13 | 1.93 | 26.69 | 136 | 0.70 |
| 241 | 8.11 | 34.03 | 2.94 | 152 | 400 | 6.63 | 34.28 | 0.85 | 26.92 | 114 | 0.83 |
| 288 | 7.60 | 34.11 | 2.13 | 139 | 500 | 6.27 | 34.35 | 0.44 | 27.03 | 104 | 0.95 |
| 388 | 6.67 | 34.27 | 0.95 | 115 | 600 | (5.69) | (34.39) | | (27.13) | (94) | (1.05) |
| 483 | 6.36 | 34.34 | 0.47 | 106 | | | | | | | |
| 587 | 5.76 | 34.39 | 0.34 | 95 | | | | | | | |

CREST; November 9, 1952; 1213 GCT; 29°50.5'N, 115°52'W; sounding, 50 fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle, 02°. 110.33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.04 | 33.39 | 5.98 | 364 | 0 | 17.04 | 33.39 | 5.98 | 24.29 | 364 | 0.00 |
| 10 | 16.52 | 33.45 | 6.13 | 348 | 10 | 16.52 | 33.45 | 6.13 | 24.46 | 348 | 0.04 |
| 20 | 15.32 | 33.47 | 5.49 | 321 | 20 | 15.32 | 33.47 | 5.49 | 24.74 | 321 | 0.07 |
| 30 | 14.99 | 33.36 | 5.49 | 322 | 30 | 14.99 | 33.36 | 5.49 | 24.73 | 322 | 0.10 |
| 50 | 12.71 | 33.42 | 4.70 | 273 | 50 | 12.71 | 33.42 | 4.70 | 25.25 | 273 | 0.16 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| 110.35 | CREST; November 9, 1952; 0929 GCT; 29°39'N, 116°13'W; sounding, 1180 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 30°. | | | | | | | | | | |
| 0 | 17.12 | 33.26 | 6.01 | 375 | 0 | 17.12 | 33.26 | 6.01 | 24.17 | 375 | 0.00 |
| 9 | 17.08 | 33.27 | 6.06 | 374 | 10 | 17.05 | 33.27 | 6.11 | 24.20 | 373 | 0.04 |
| 18 | 15.38 | 33.26 | 6.50 | 338 | 20 | 15.26 | 33.26 | 6.53 | 24.60 | 335 | 0.07 |
| 31 | 14.53 | 33.20 | 6.57 | 325 | 30 | 14.64 | 33.21 | 6.57 | 24.69 | 326 | 0.11 |
| 45 | 13.08 | 33.17 | 6.20 | 298 | 50 | 12.52 | 33.16 | 5.76 | 25.08 | 289 | 0.17 |
| 55 | 12.09 | 33.16 | 5.38 | 281 | 75 | 11.41 | 33.40 | 4.65 | 25.48 | 251 | 0.24 |
| 68 | 11.58 | 33.27 | 4.97 | 264 | 100 | 10.75 | 33.69 | 3.42 | 25.82 | 219 | 0.29 |
| 84 | 11.18 | 33.52 | 4.15 | 238 | 150 | 10.40 | 34.02 | 2.78 | 26.14 | 188 | 0.40 |
| 103 | 10.65 | 33.73 | 3.30 | 214 | 200 | 9.52 | 34.22 | 2.08 | 26.44 | 159 | 0.49 |
| 125 | 10.26 | 33.87 | 2.86 | 197 | 250 | 9.40 | 34.38 | 1.22 | 26.59 | 146 | 0.57 |
| 162 | 9.69 | 34.02 | 2.76 | 177 | 300 | 8.59 | 34.39 | 1.01 | 26.73 | 133 | 0.64 |
| 200 | 9.52 | 34.22 | 2.08 | 159 | 400 | 7.53 | 34.34 | 0.73 | 26.85 | 121 | 0.77 |
| 239 | 9.46 | 34.37 | 1.30 | 147 | 500 | 6.65 | 34.36 | 0.43 | 26.98 | 108 | 0.89 |
| 324 | 8.22 | 34.38 | 0.93 | 128 | | | | | | | |
| 411 | 7.41 | 34.34 | 0.67 | 120 | | | | | | | |
| 511 | 6.56 | 34.36 | 0.42 | 107 | | | | | | | |
| 110.40 | CREST; November 9, 1952; 0612 GCT; 29°30'N, 116°33'W; sounding, 280 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°. | | | | | | | | | | |
| 0 | 18.15 | 33.35 | 5.76 | 393 | 0 | 18.15 | 33.35 | 5.76 | 23.99 | 393 | 0.00 |
| 9 | 18.15 | 33.33 | 5.76 | 394 | 10 | 18.13 | 33.33 | 5.78 | 23.98 | 394 | 0.04 |
| 23 | 17.83 | 33.26 | 5.91 | 392 | 20 | 17.95 | 33.28 | 5.89 | 23.99 | 393 | 0.08 |
| 46 | 17.53 | 33.27 | 5.89 | 384 | 30 | 17.75 | 33.26 | 5.92 | 24.02 | 390 | 0.12 |
| 70 | 14.18 | 33.21 | 6.34 | 317 | 50 | 17.51 | 33.27 | 5.95 | 24.09 | 384 | 0.20 |
| 90 | 12.33 | 33.03 | 6.03 | 295 | 75 | 13.70 | 33.16 | 6.33 | 24.85 | 311 | 0.28 |
| 136 | 10.02 | 33.42 | 4.35 | 227 | 100 | 11.69 | 33.04 | 5.74 | 25.15 | 283 | 0.36 |
| 174 | 9.59 | 34.01 | 2.77 | 176 | 150 | 9.52 | 33.60 | 3.70 | 25.96 | 205 | 0.48 |
| 216 | 9.39 | 34.20 | 2.22 | 159 | 200 | 9.52 | 34.15 | 2.36 | 26.39 | 165 | 0.58 |
| 260 | 8.43 | 34.24 | 1.53 | 141 | 250 | 8.67 | 34.23 | 1.76 | 26.59 | 146 | 0.65 |
| 309 | 8.07 | 34.39 | 0.91 | 125 | 300 | 8.12 | 34.37 | 0.97 | 26.78 | 127 | 0.73 |
| 358 | 7.97 | 34.39 | 0.77 | 124 | | | | | | | |
| 110.50 | CREST; November 9, 1952; 0133 GCT; 29°17'N, 117°01'W; sounding, 1750 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 18.51 | 33.47 | 5.76 | 392 | 0 | 18.51 | 33.47 | 5.76 | 24.00 | 392 | 0.00 |
| 10 | 18.49 | 33.37 | 5.74 | 399 | 10 | 18.49 | 33.37 | 5.74 | 23.93 | 399 | 0.04 |
| 25 | 18.18 | 33.33 | 5.80 | 395 | 20 | 18.25 | 33.35 | 5.78 | 23.97 | 395 | 0.08 |
| 49 | 18.04 | 33.29 | 5.81 | 394 | 30 | 18.13 | 33.32 | 5.80 | 23.98 | 394 | 0.12 |
| 73 | 15.44 | 33.31 | 6.34 | 335 | 50 | 18.03 | 33.29 | 5.83 | 23.98 | 394 | 0.20 |
| 97 | 13.46 | 33.29 | 6.01 | 297 | 75 | 15.37 | 33.31 | 6.33 | 24.61 | 334 | 0.29 |
| 149 | 10.64 | 33.62 | 3.79 | 222 | 100 | 13.29 | 33.30 | 5.85 | 25.04 | 293 | 0.37 |
| 197 | 9.07 | 33.84 | 3.40 | 181 | 150 | 10.60 | 33.63 | 3.76 | 25.80 | 221 | 0.50 |
| 244 | 8.19 | 34.00 | 3.22 | 156 | 200 | 9.00 | 33.86 | 3.40 | 26.25 | 178 | 0.60 |
| 290 | 7.72 | 34.09 | 2.40 | 143 | 250 | 8.14 | 34.02 | 3.15 | 26.50 | 154 | 0.68 |
| 386 | 6.76 | 34.22 | 1.02 | 120 | 300 | 7.62 | 34.10 | 2.22 | 26.64 | 140 | 0.76 |
| 477 | 6.58 | 34.36 | 0.37 | 107 | 400 | 6.73 | 34.24 | 0.86 | 26.88 | 118 | 0.89 |
| 575 | 6.02 | 34.41 | 0.24 | 97 | 500 | 6.45 | 34.38 | 0.32 | 27.03 | 104 | 1.01 |
| 668 | 5.45 | 34.40 | 0.29 | 91 | 600 | 5.87 | 34.40 | 0.24 | 27.12 | 96 | 1.12 |
| 767 | 4.95 | 34.45 | 0.33 | 81 | 700 | 5.28 | 34.42 | 0.29 | 27.20 | 87 | 1.22 |
| 963 | 4.16 | 34.53 | 0.57 | 67 | 800 | 4.81 | 34.46 | 0.38 | 27.29 | 79 | 1.31 |
| | | | | | 1000 | (4.04) | (34.54) | (0.62) | (27.44) | (65) | (1.47) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; November 8, 1952; 2125 GCT; 29°00'N, 117°33'W; sounding, 1900 fm; wind, 330°, force 4; weather, partly cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | | 110.60 |
| 0 | 18.69 | 33.43 | 5.78 | 399 | 0 | 18.69 | 33.43 | 5.78 | 23.92 | 399 | 0.00 |
| 10 | 18.48 | 33.50 | 5.72 | 389 | 10 | 18.48 | 33.50 | 5.72 | 24.03 | 389 | 0.04 |
| 20 | 18.30 | 33.41 | 5.78 | 392 | 20 | 18.30 | 33.41 | 5.78 | 24.00 | 392 | 0.08 |
| 35 | 18.21 | 33.44 | 5.78 | 387 | 30 | 18.23 | 33.44 | 5.75 | 24.04 | 388 | 0.12 |
| 50 | 16.58 | 33.42 | 6.33 | 352 | 50 | 16.58 | 33.42 | 6.33 | 24.42 | 352 | 0.19 |
| 64 | 15.01 | 33.34 | 6.48 | 324 | 75 | 14.57 | 33.42 | 6.30 | 24.87 | 309 | 0.27 |
| 78 | 14.44 | 33.42 | 6.22 | 307 | 100 | 12.66 | 33.37 | 5.47 | 25.22 | 276 | 0.35 |
| 97 | 12.88 | 33.37 | 5.58 | 280 | 150 | 11.12 | 33.88 | 2.44 | 25.90 | 211 | 0.47 |
| 121 | 11.66 | 33.51 | 4.12 | 248 | 200 | 10.88 | 34.19 | 1.50 | 26.19 | 184 | 0.57 |
| 150 | 11.12 | 33.88 | 2.44 | 211 | 250 | 9.82 | 34.28 | 1.86 | 26.44 | 160 | 0.66 |
| 197 | 10.94 | 34.18 | 1.50 | 186 | 300 | 8.63 | 34.22 | 1.80 | 26.59 | 146 | 0.74 |
| 243 | 10.04 | 34.28 | 1.85 | 163 | 400 | 7.48 | 34.31 | 0.87 | 26.83 | 123 | 0.88 |
| 289 | 8.74 | 34.22 | 1.85 | 148 | 500 | 6.39 | 34.28 | 0.50 | 26.96 | 111 | 1.00 |
| 387 | 7.66 | 34.32 | 0.97 | 125 | 600 | (6.11) | (34.38) | | (27.07) | (100) | (1.12) |
| 483 | 6.48 | 34.28 | 0.55 | 112 | | | | | | | |
| 586 | 6.13 | 34.38 | 0.30 | 100 | | | | | | | |
| CREST; November 9, 1952; 1701 GCT; 29°22.5'N, 115°18'W; sounding, 32 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 01°. | | | | | | | | | | | 113.30 |
| 0 | 18.00 | 33.52 | 6.10 | 377 | 0 | 18.00 | 33.52 | 6.10 | 24.16 | 377 | 0.00 |
| 10 | 17.98 | 33.55 | 6.15 | 374 | 10 | 17.98 | 33.55 | 6.15 | 24.19 | 374 | 0.04 |
| 20 | 17.98 | 33.49 | 6.15 | 378 | 20 | 17.98 | 33.49 | 6.15 | 24.14 | 378 | 0.08 |
| 31 | 16.81 | 33.45 | 5.82 | 355 | 30 | 16.93 | 33.45 | 5.90 | 24.36 | 357 | 0.11 |
| CREST; November 9, 1952; 1948 GCT; 29°12'N, 115°39'W; sounding, 700 fm; wind, 340°, force 4; weather, partly cloudy; sea, slight; wire angle, 02°. | | | | | | | | | | | 113.35 |
| 0 | 17.94 | 33.45 | 6.19 | 380 | 0 | 17.94 | 33.45 | 6.19 | 24.12 | 380 | 0.00 |
| 10 | 17.90 | 33.47 | 6.19 | 378 | 10 | 17.90 | 33.47 | 6.19 | 24.15 | 378 | 0.04 |
| 20 | 17.76 | 33.49 | 6.16 | 373 | 20 | 17.76 | 33.49 | 6.16 | 24.20 | 373 | 0.08 |
| 35 | 16.98 | 33.41 | 5.97 | 361 | 30 | 17.35 | 33.46 | 6.05 | 24.27 | 366 | 0.11 |
| 55 | 13.27 | 33.37 | 5.41 | 287 | 50 | 14.53 | 33.37 | 5.60 | 24.84 | 312 | 0.18 |
| 69 | 11.28 | 33.51 | 4.33 | 241 | 75 | 10.90 | 33.58 | 3.90 | 25.71 | 229 | 0.25 |
| 83 | 10.79 | 33.68 | 3.40 | 220 | 100 | 10.86 | 33.89 | 2.28 | 25.96 | 206 | 0.30 |
| 105 | 10.90 | 33.95 | 2.18 | 202 | 150 | 10.77 | 34.18 | 1.84 | 26.20 | 183 | 0.40 |
| 128 | 10.95 | 34.12 | 2.01 | 190 | 200 | 10.24 | 34.25 | 1.23 | 26.35 | 169 | 0.49 |
| 155 | 10.71 | 34.19 | 1.76 | 181 | 250 | 9.60 | 34.33 | 0.92 | 26.52 | 153 | 0.57 |
| 205 | 10.18 | 34.26 | 1.19 | 167 | 300 | 8.98 | 34.38 | 0.75 | 26.66 | 139 | 0.65 |
| 260 | 9.47 | 34.34 | 0.87 | 150 | 400 | 8.02 | 34.38 | 0.48 | 26.80 | 125 | 0.79 |
| 306 | 8.91 | 34.39 | 0.74 | 137 | 500 | 6.85 | 34.38 | 0.37 | 26.97 | 109 | 0.91 |
| 415 | 7.85 | 34.38 | 0.45 | 123 | 600 | 6.00 | 34.40 | 0.33 | 27.10 | 97 | 1.02 |
| 522 | 6.62 | 34.38 | 0.35 | 106 | | | | | | | |
| 632 | 5.80 | 34.41 | 0.34 | 94 | | | | | | | |
| CREST; November 9, 1952; 2245, 2314 GCT; 29°02'N, 115°58.5'W; sounding, 1020 fm; wind, 320°, force 5; weather, partly cloudy; sea, moderate; wire angle, 18°, 17°. | | | | | | | | | | | 113.40 |
| 0 | 19.23 | 33.68 | 6.02 | 394 | 0 | 19.23 | 33.68 | 6.02 | 23.98 | 394 | 0.00 |
| 10 | 19.16 | 33.66 | 5.95 | 394 | 10 | 19.16 | 33.66 | 5.95 | 23.98 | 394 | 0.04 |
| 20 | 18.22 | 33.56 | 5.92 | 379 | 20 | 18.22 | 33.56 | 5.92 | 24.14 | 379 | 0.08 |
| 34 | 16.00 | 33.37 | 6.15 | 343 | 30 | 16.85 | 33.41 | 6.12 | 24.35 | 359 | 0.12 |
| 53 | 13.00 | 33.24 | 5.93 | 292 | 50 | 13.63 | 33.25 | 5.99 | 24.93 | 303 | 0.18 |
| 66 | 11.58 | 33.24 | 5.54 | 266 | 75 | 11.48 | 33.46 | 4.05 | 25.51 | 248 | 0.25 |
| 80 | 11.44 | 33.51 | 3.96 | 244 | 100 | 11.30 | 33.58 | 3.82 | 25.64 | 236 | 0.31 |
| 103 | 10.80 | 33.60 | 3.78 | 226 | 150 | 10.12 | 34.05 | 2.44 | 26.21 | 182 | 0.42 |
| 126 | 10.23 | 33.83 | 3.16 | 200 | 200 | 9.91 | 34.30 | 1.44 | 26.44 | 160 | 0.50 |
| 153 | 10.10 | 34.08 | 2.30 | 179 | 250 | 9.48 | 34.28 | 1.17 | 26.50 | 154 | 0.59 |
| 200 | 9.91 | 34.30 | 1.44 | 160 | 300 | 8.82 | 34.41 | 0.93 | 26.71 | 135 | 0.66 |
| 253 | 9.44 | 34.28 | 1.14 | 154 | 400 | 7.63 | 34.43 | 0.55 | 26.90 | 116 | 0.79 |
| 298 | 8.86 | 34.40 | 0.97 | 136 | 500 | 6.53 | 34.40 | 0.37 | 27.03 | 104 | 0.91 |
| 403 | 7.58 | 34.43 | 0.52 | 115 | 600 | 5.90 | 34.42 | 0.28 | 27.13 | 94 | 1.02 |
| 504 | 6.48 | 34.40 | 0.36 | 103 | | | | | | | |
| 612 | 5.84 | 34.42 | 0.28 | 94 | | | | | | | |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

1145.30 CREST; November 18, 1952; 2023 GCT;[a] 28°55.5'N, 115°29'W; sounding, 570 fm; wind, 010°, force 4; weather, clear; sea, moderate; wire angle, 15°.

| | |
|---|---|
| 0 | 16.93 |
| 7 | 16.91 |
| 17 | 16.89 |
| 27 | 16.88 |
| 36 | 16.88 |
| 45 | 14.09 |
| 50 | 13.58 |
| 55 | 12.97 |

1145.30 CREST; November 18, 1952; 2101 GCT;[a] 28°55.5'N, 115°29'W; sounding, 570 fm; wind, 010°, force 4; weather, clear; sea, moderate; wire angle, 05°.

| | |
|---|---|
| 0 | 16.98 |
| 10 | 16.91 |
| 20 | 16.90 |
| 30 | 16.90 |
| 40 | 14.20 |
| 50 | 13.07 |
| 70 | 11.92 |
| 89 | 11.31 |
| 108 | 11.52 |
| 117 | 11.14 |
| 127 | 11.16 |
| 130 | 10.72 |

1145.30 CREST; November 18, 1952; 2151 GCT;[a] 28°55.5'N, 115°29'W; sounding, 570 fm; wind, 010°, force 4; weather, clear; sea, moderate; wire angle, 09°.

| | |
|---|---|
| 0 | 17.27 |
| 10 | 17.19 |
| 25 | 16.93 |
| 50 | 12.91 |
| 73 | 11.72 |
| 96 | 11.28 |
| 119 | 11.18 |
| 141 | 11.36 |
| 164 | 10.29 |
| 187 | 9.12 |
| 210 | 8.98 |
| 234 | 9.70 |
| 253 | 9.18 |
| 263 | 8.99 |
| 282 | 9.18 |

117.26 CREST; November 10, 1952; 1611 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.05 | 33.51 | 5.60 | 379 | 0 | 18.05 | 33.51 | 5.60 | 24.14 | 379 | 0.00 |
| 10 | 18.04 | 33.48 | 5.63 | 381 | 10 | 18.04 | 33.48 | 5.63 | 24.12 | 381 | 0.04 |
| 20 | 17.54 | 33.49 | 5.52 | 368 | 20 | 17.54 | 33.49 | 5.52 | 24.25 | 368 | 0.08 |
| 30 | 16.51 | 33.42 | 5.54 | 350 | 30 | 16.51 | 33.42 | 5.54 | 24.44 | 350 | 0.11 |
| 50 | 13.18 | 33.45 | 4.49 | 280 | 50 | 13.18 | 33.45 | 4.49 | 25.18 | 280 | 0.18 |

117.30 CREST; November 10, 1952; 1356 GCT; 28°48'N, 114°56.5'W; sounding, 50 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.79 | 33.59 | 5.98 | 367 | 0 | 17.79 | 33.59 | 5.98 | 24.26 | 367 | 0.00 |
| 10 | 16.90 | 33.48 | 6.00 | 355 | 10 | 16.90 | 33.48 | 6.00 | 24.39 | 355 | 0.04 |
| 20 | 15.90 | 33.44 | 5.77 | 336 | 20 | 15.90 | 33.44 | 5.77 | 24.59 | 336 | 0.07 |
| 30 | 15.64 | 33.52 | 5.61 | 324 | 30 | 15.64 | 33.52 | 5.61 | 24.71 | 324 | 0.10 |
| 50 | 14.18 | 33.50 | 5.09 | 296 | 50 | 14.18 | 33.50 | 5.09 | 25.01 | 296 | 0.17 |

a) Bathythermograph calibration cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

CREST; November 10, 1952; 0648 GCT; 28°38'N, 115°16'W; sounding, 132 fm; wind, 310°, force 4; weather, clear; sea, slight; wire angle, 04°. 117.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.57 | 33.53 | 5.86 | 389 | 0 | 18.57 | 33.53 | 5.86 | 24.03 | 389 | 0.00 |
| 10 | 18.54 | 33.57 | 5.88 | 386 | 10 | 18.54 | 33.57 | 5.88 | 24.07 | 386 | 0.04 |
| 25 | 15.56 | 33.46 | 5.80 | 327 | 20 | 16.70 | 33.50 | 5.83 | 24.45 | 349 | 0.08 |
| 50 | 12.92 | 33.46 | 5.50 | 274 | 30 | 14.70 | 33.45 | 5.76 | 24.86 | 310 | 0.11 |
| 74 | 12.36 | 33.56 | 4.07 | 256 | 50 | 12.92 | 33.46 | 5.50 | 25.24 | 274 | 0.17 |
| 98 | 11.35 | 33.70 | 3.65 | 228 | 75 | 12.34 | 33.56 | 4.04 | 25.43 | 256 | 0.23 |
| 122 | 11.71 | 34.15 | 1.89 | 201 | 100 | 11.35 | 33.71 | 3.57 | 25.73 | 227 | 0.29 |
| 150 | 10.96 | 34.11 | 1.82 | 191 | 150 | 10.96 | 34.11 | 1.82 | 26.11 | 191 | 0.40 |

CREST; November 10, 1952; 0353 GCT; 28°28'N, 115°35.5'W; sounding, 550 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 10°. 117.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.44 | 33.74 | 5.75 | 395 | 0 | 19.44 | 33.74 | 5.75 | 23.97 | 395 | 0.00 |
| 10 | 19.40 | 33.75 | 5.83 | 393 | 10 | 19.40 | 33.75 | 5.83 | 23.99 | 393 | 0.04 |
| 25 | 16.28 | 33.54 | 5.72 | 336 | 20 | 16.90 | 33.65 | 5.79 | 24.52 | 342 | 0.08 |
| 49 | 14.62 | 33.57 | 4.86 | 299 | 30 | 16.03 | 33.54 | 5.55 | 24.64 | 331 | 0.11 |
| 74 | 12.12 | 33.44 | 4.93 | 261 | 50 | 14.55 | 33.57 | 4.83 | 24.99 | 298 | 0.17 |
| 99 | 12.48 | 33.79 | 3.49 | 242 | 75 | 12.12 | 33.44 | 4.92 | 25.38 | 261 | 0.24 |
| 149 | 11.84 | 34.35 | 1.34 | 189 | 100 | 12.48 | 33.80 | 3.40 | 25.59 | 241 | 0.31 |
| 197 | 10.71 | 34.32 | 1.47 | 171 | 150 | 11.80 | 34.35 | 1.34 | 26.14 | 188 | 0.42 |
| 242 | 10.30 | 34.42 | 1.01 | 157 | 200 | 10.68 | 34.32 | 1.44 | 26.32 | 171 | 0.51 |
| 288 | 9.76 | 34.42 | 0.76 | 148 | 250 | 10.23 | 34.43 | 0.96 | 26.49 | 155 | 0.59 |
| 340 | 8.76 | 34.36 | 0.74 | 137 | 300 | 9.47 | 34.40 | 0.74 | 26.59 | 145 | 0.67 |
| 385 | 8.38 | 34.39 | 0.58 | 130 | 400 | 8.18 | 34.39 | 0.54 | 26.79 | 127 | 0.81 |
| 434 | 7.70 | 34.39 | 0.50 | 120 | 500 | (6.90) | (34.41) | (0.35) | (26.99) | (108) | (0.94) |
| 484 | 7.08 | 34.40 | 0.39 | 111 | | | | | | | |

CREST; November 10, 1952; 2305 GCT; 28°23'N, 114°15'W; sounding, 30 fm; wind, 330°, force 5; weather, clear; sea, moderate; wire angle, 05°. 120.25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.48 | 33.47 | 5.64 | 392 | 0 | 18.48 | 33.47 | 5.64 | 24.00 | 392 | 0.00 |
| 10 | 18.48 | 33.49 | 5.61 | 390 | 10 | 18.48 | 33.49 | 5.61 | 24.02 | 390 | 0.04 |
| 20 | 16.85 | 33.39 | 5.59 | 360 | 20 | 16.85 | 33.39 | 5.59 | 24.34 | 360 | 0.08 |
| 30 | 15.17 | 33.42 | 5.21 | 322 | 30 | 15.17 | 33.42 | 5.21 | 24.74 | 322 | 0.11 |

CREST; November 11, 1952; 0525 GCT; 28°13'N, 114°34'W; sounding, 50 fm; wind, 360°, force 3; weather, clear; sea, moderate; wire angle, 00°. 120.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.36 | 33.55 | 5.17 | 407 | 0 | 19.36 | 33.55 | 5.17 | 23.84 | 407 | 0.00 |
| 10 | 19.38 | 33.56 | 5.31 | 407 | 10 | 19.38 | 33.56 | 5.31 | 23.85 | 407 | 0.04 |
| 20 | 19.38 | 33.55 | 5.26 | 407 | 20 | 19.38 | 33.55 | 5.26 | 23.84 | 407 | 0.08 |
| 30 | 19.37 | 33.56 | 5.22 | 406 | 30 | 19.37 | 33.56 | 5.22 | 23.85 | 406 | 0.12 |
| 50 | 19.37 | 33.55 | 5.22 | 407 | 50 | 19.37 | 33.55 | 5.22 | 23.84 | 407 | 0.20 |

CREST; November 11, 1952; 0907 GCT; 28°03'N, 114°54'W; sounding, 44 fm; wind, 360°, force 4; weather, clear; sea, moderate; wire angle, 01°. 120.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.12 | 33.55 | 5.31 | 401 | 0 | 19.12 | 33.55 | 5.31 | 23.90 | 401 | 0.00 |
| 10 | 19.14 | 33.55 | 5.31 | 402 | 10 | 19.14 | 33.55 | 5.31 | 23.90 | 402 | 0.04 |
| 20 | 19.15 | 33.56 | 5.23 | 401 | 20 | 19.15 | 33.56 | 5.23 | 23.90 | 401 | 0.08 |
| 30 | 19.09 | 33.56 | 5.27 | 400 | 30 | 19.09 | 33.56 | 5.27 | 23.92 | 400 | 0.12 |
| 50 | 17.80 | 33.55 | 5.19 | 370 | 50 | 17.80 | 33.55 | 5.19 | 24.23 | 370 | 0.20 |

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| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 120.45 | CREST; November 12, 1952; 0657 GCT; 27°43'N, 115°33'W; sounding, 1250 fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle, 20°. | | | | | | | | | | |
| 0 | 19.74 | 33.68 | 5.40 | 407 | 0 | 19.74 | 33.68 | 5.40 | 23.84 | 407 | 0.00 |
| 9 | 19.77 | 33.70 | 5.41 | 406 | 10 | 19.77 | 33.70 | 5.41 | 23.85 | 406 | 0.04 |
| 23 | 19.75 | 33.64 | 5.40 | 410 | 20 | 19.76 | 33.70 | 5.40 | 23.85 | 406 | 0.08 |
| 47 | 14.22 | 33.27 | 5.99 | 313 | 30 | 19.30 | 33.57 | 5.44 | 23.87 | 404 | 0.12 |
| 70 | 12.24 | 33.35 | 5.04 | 270 | 50 | 13.65 | 33.27 | 5.97 | 24.94 | 302 | 0.19 |
| 94 | 11.43 | 33.55 | 4.02 | 241 | 75 | 12.05 | 33.39 | 4.85 | 25.35 | 263 | 0.26 |
| 144 | 10.24 | 34.04 | 2.21 | 184 | 100 | 10.80 | 33.61 | 3.75 | 25.75 | 225 | 0.33 |
| 188 | 9.74 | 34.20 | 1.89 | 164 | 150 | 10.19 | 34.06 | 2.16 | 26.21 | 182 | 0.43 |
| 231 | 9.37 | 34.30 | 1.51 | 151 | 200 | 9.62 | 34.22 | 1.78 | 26.43 | 161 | 0.52 |
| 274 | 9.17 | 34.46 | 0.90 | 136 | 250 | 9.29 | 34.39 | 1.27 | 26.61 | 143 | 0.59 |
| 365 | 8.32 | 34.47 | 0.45 | 123 | 300 | 8.93 | 34.47 | 0.77 | 26.73 | 132 | 0.67 |
| 452 | 7.51 | 34.47 | 0.30 | 111 | 400 | 8.03 | 34.48 | 0.38 | 26.88 | 118 | 0.80 |
| 545 | 6.30 | 34.39 | 0.25 | 102 | 500 | 6.85 | 34.42 | 0.26 | 27.00 | 106 | 0.92 |
| 635 | 5.73 | 34.40 | 0.28 | 94 | 600 | 5.97 | 34.39 | 0.26 | 27.10 | 98 | 1.03 |
| 730 | 5.14 | 34.45 | 0.30 | 83 | 700 | 5.33 | 34.44 | 0.29 | 27.21 | 86 | 1.13 |
| 922 | 4.30 | 34.49 | 0.62 | 72 | 800 | 4.82 | 34.48 | 0.36 | 27.31 | 78 | 1.22 |
| | | | | | 1000 | (4.00) | (34.50) | | (27.41) | (68) | (1.38) |
| 120.50 | CREST; November 12, 1952; 1012 GCT; 27°31.5'N, 115°51'W; sounding, 2000 fm; wind, 360°, force 4; weather, clear; sea, moderate; wire angle, 16°. | | | | | | | | | | |
| 0 | 19.82 | 33.75 | 5.33 | 404 | 0 | 19.82 | 33.75 | 5.33 | 23.88 | 404 | 0.00 |
| 10 | 19.75 | 33.73 | 5.38 | 403 | 10 | 19.75 | 33.73 | 5.38 | 23.88 | 403 | 0.04 |
| 19 | 19.32 | 33.49 | 5.39 | 410 | 20 | 19.30 | 33.48 | 5.42 | 23.81 | 411 | 0.08 |
| 34 | 16.61 | 33.31 | 5.91 | 360 | 30 | 17.40 | 33.33 | 5.78 | 24.16 | 377 | 0.12 |
| 48 | 14.68 | 33.31 | 5.91 | 320 | 50 | 14.27 | 33.31 | 5.91 | 24.85 | 311 | 0.19 |
| 62 | 13.06 | 33.27 | 5.05 | 291 | 75 | 12.55 | 33.49 | 3.93 | 25.33 | 265 | 0.26 |
| 76 | 12.44 | 33.50 | 3.95 | 262 | 100 | 11.35 | 33.67 | 3.15 | 25.70 | 230 | 0.32 |
| 94 | 11.40 | 33.59 | 3.55 | 237 | 150 | 10.13 | 34.00 | 2.49 | 26.17 | 185 | 0.43 |
| 117 | 11.26 | 33.94 | 2.36 | 209 | 200 | 9.86 | 34.32 | 1.14 | 26.46 | 157 | 0.52 |
| 143 | 10.20 | 33.99 | 2.53 | 187 | 250 | 9.26 | 34.41 | 0.80 | 26.63 | 141 | 0.59 |
| 187 | 9.98 | 34.27 | 1.34 | 163 | 300 | 8.47 | 34.36 | 0.73 | 26.72 | 133 | 0.67 |
| 231 | 9.56 | 34.42 | 0.81 | 145 | 400 | 7.39 | 34.40 | 0.40 | 26.91 | 115 | 0.80 |
| 276 | 8.82 | 34.37 | 0.81 | 138 | 500 | 6.57 | 34.41 | 0.24 | 27.03 | 103 | 0.91 |
| 372 | 7.55 | 34.39 | 0.48 | 118 | | | | | | | |
| 465 | 6.96 | 34.41 | 0.24 | 108 | | | | | | | |
| 567 | 5.88 | 34.39 | 0.24 | 96 | | | | | | | |
| 120.60 | CREST; November 12, 1952; 1455 GCT; 27°15'N, 116°34'W; sounding, 2000 fm; wind, 350°, force 3; weather, partly cloudy; sea, moderate; wire angle, 08°. | | | | | | | | | | |
| 0 | 19.01 | 33.42 | 5.33 | 408 | 0 | 19.01 | 33.42 | 5.33 | 23.83 | 408 | 0.00 |
| 10 | 19.02 | 33.43 | 5.33 | 407 | 10 | 19.02 | 33.43 | 5.33 | 23.84 | 407 | 0.04 |
| 25 | 18.98 | 33.45 | 5.32 | 405 | 20 | 18.99 | 33.45 | 5.32 | 23.86 | 405 | 0.08 |
| 49 | 16.08 | 33.26 | 5.98 | 353 | 30 | 18.90 | 33.45 | 5.43 | 23.88 | 403 | 0.12 |
| 73 | 14.22 | 33.23 | 5.98 | 316 | 50 | 16.00 | 33.26 | 5.98 | 24.43 | 351 | 0.20 |
| 98 | 12.12 | 33.19 | 5.51 | 279 | 75 | 14.12 | 33.23 | 5.97 | 24.82 | 314 | 0.28 |
| 151 | 9.74 | 33.75 | 3.41 | 198 | 100 | 11.97 | 33.19 | 5.40 | 25.21 | 277 | 0.36 |
| 199 | 9.24 | 34.10 | 2.40 | 164 | 150 | 9.78 | 33.73 | 3.47 | 26.02 | 200 | 0.48 |
| 246 | 8.80 | 34.23 | 1.66 | 148 | 200 | 9.24 | 34.10 | 2.36 | 26.40 | 164 | 0.57 |
| 292 | 8.38 | 34.23 | 1.09 | 141 | 250 | 8.77 | 34.24 | 1.62 | 26.58 | 146 | 0.65 |
| 387 | 7.42 | 34.33 | 0.66 | 121 | 300 | 8.30 | 34.23 | 1.05 | 26.65 | 140 | 0.72 |
| 480 | 6.72 | 34.33 | 0.36 | 111 | 400 | 7.33 | 34.33 | 0.61 | 26.87 | 119 | 0.86 |
| 576 | 5.99 | 34.39 | 0.26 | 98 | 500 | 6.57 | 34.34 | 0.33 | 26.98 | 109 | 0.98 |
| 668 | 5.42 | 34.43 | 0.27 | 88 | 600 | 5.83 | 34.40 | 0.27 | 27.12 | 95 | 1.09 |
| 768 | 4.94 | 34.48 | 0.29 | 79 | 700 | 5.26 | 34.45 | 0.27 | 27.23 | 85 | 1.19 |
| 963 | 4.21 | 34.53 | 0.53 | 68 | 800 | 4.83 | 34.49 | 0.32 | 27.31 | 77 | 1.28 |
| | | | | | 1000 | (4.08) | (34.53) | (0.59) | (27.43) | (66) | (1.44) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| CREST; November 12, 1952; 1931 GCT; 26°52'N, 117°10'W; sounding, 2000 fm; wind, 340°, force 4; weather, partly cloudy; sea, slight; wire angle, 11°. | | | | | | | | | | | 120.70 |
| 0 | 19.57 | 33.58 | 5.25 | 410 | 0 | 19.57 | 33.58 | 5.25 | 23.81 | 410 | 0.00 |
| 10 | 19.60 | 33.55 | 5.23 | 413 | 10 | 19.60 | 33.55 | 5.23 | 23.78 | 413 | 0.04 |
| 20 | 19.60 | 33.58 | 5.23 | 411 | 20 | 19.60 | 33.58 | 5.23 | 23.80 | 411 | 0.08 |
| 34 | 18.82 | 33.46 | 5.34 | 400 | 30 | 19.24 | 33.52 | 5.30 | 23.85 | 406 | 0.12 |
| 64 | 15.62 | 33.35 | 5.96 | 336 | 50 | 17.38 | 33.40 | 5.70 | 24.22 | 371 | 0.20 |
| 77 | 14.28 | 33.29 | 5.88 | 313 | 75 | 14.40 | 33.30 | 5.91 | 24.81 | 315 | 0.29 |
| 96 | 12.72 | 33.26 | 5.56 | 285 | 100 | 12.54 | 33.26 | 5.44 | 25.16 | 282 | 0.36 |
| 118 | 11.64 | 33.38 | 4.94 | 257 | 150 | 10.62 | 33.70 | 3.16 | 25.85 | 216 | 0.49 |
| 145 | 10.67 | 33.65 | 3.36 | 220 | 200 | 10.13 | 34.12 | 1.87 | 26.26 | 177 | 0.59 |
| 191 | 10.27 | 34.07 | 1.92 | 183 | 250 | 9.44 | 34.32 | 1.29 | 26.53 | 151 | 0.67 |
| 237 | 9.60 | 34.29 | 1.53 | 156 | 300 | 8.74 | 34.38 | 0.82 | 26.69 | 136 | 0.75 |
| 282 | 9.01 | 34.37 | 0.87 | 140 | 400 | 7.55 | 34.32 | 0.48 | 26.83 | 123 | 0.88 |
| 381 | 7.66 | 34.32 | 0.55 | 125 | 500 | 6.74 | 34.39 | 0.29 | 27.00 | 107 | 1.00 |
| 473 | 7.02 | 34.39 | 0.26 | 111 | | | | | | | |
| 578 | 5.91 | 34.38 | 0.40 | 98 | | | | | | | |
| CREST; November 13, 1952; 0017 GCT; 26°32.5'N, 117°48'W; sounding, 2000 fm; wind, 360°, force 4; weather, cloudy; sea, moderate; wire angle, 20°. | | | | | | | | | | | 120.80 |
| 0 | 20.12 | 33.67u | 5.16 | 417 | 0 | 20.12 | (33.88) | 5.16 | (23.90) | (402) | (0.00) |
| 9 | 20.12 | 33.88 | 5.22 | 402 | 10 | 20.12 | 33.88 | 5.23 | 23.90 | 402 | 0.04 |
| 23 | 20.10 | 33.86 | 5.19 | 403 | 20 | 20.11 | 33.88 | 5.19 | 23.90 | 401 | 0.08 |
| 47 | 20.09 | 33.73 | 5.25 | 412 | 30 | 20.10 | 33.84 | 5.19 | 23.87 | 404 | 0.12 |
| 70 | 16.84 | 33.50 | 5.80 | 352 | 50 | 19.60 | 33.69 | 5.29 | 23.89 | 403 | 0.20 |
| 93 | 16.18 | 33.81 | 5.63 | 315 | 75 | 16.70 | 33.52 | 5.81 | 24.47 | 347 | 0.30 |
| 144 | 12.20 | 33.37 | 5.07 | 267 | 100 | 15.96 | 33.81 | 5.58 | 24.86 | 310 | 0.38 |
| | | | | | 150 | (11.71) | (33.37) | (4.93) | (25.40) | (259) | (0.52) |
| CREST; November 13, 1952; 0503 GCT; 26°13'N, 118°28'W; sounding, 2000 fm; wind, 020°, force 6; weather, cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | | 120.90 |
| 0 | 20.84 | 33.85 | 5.09 | 422 | 0 | 20.84 | 33.85 | 5.09 | 23.68 | 422 | 0.00 |
| 10 | 20.85 | 33.81 | 5.08 | 425 | 10 | 20.85 | 33.81 | 5.08 | 23.65 | 425 | 0.04 |
| 20 | 20.86 | 33.91 | 5.08 | 418 | 20 | 20.86 | 33.91 | 5.08 | 23.72 | 418 | 0.08 |
| 34 | 20.84 | 33.82 | 5.10 | 424 | 30 | 20.84 | 33.88 | 5.09 | 23.71 | 420 | 0.13 |
| 49 | 20.81 | 33.75 | 5.07 | 429 | 50 | 20.79 | 33.75 | 5.06 | 23.62 | 428 | 0.21 |
| 63 | 19.92 | 33.70 | 5.38 | 410 | 75 | 17.19 | 33.56 | 5.73 | 24.39 | 355 | 0.31 |
| 77 | 17.04 | 33.55 | 5.73 | 353 | 100 | 15.50 | 33.46 | 5.60 | 24.70 | 326 | 0.40 |
| 95 | 15.70 | 33.48 | 5.64 | 328 | 150 | 12.06 | 33.59 | 4.28 | 25.50 | 249 | 0.54 |
| 119 | 14.32 | 33.39 | 5.42 | 306 | 200 | 9.94 | 33.97 | 2.90 | 26.18 | 185 | 0.65 |
| 146 | 12.24 | 33.53 | 4.43 | 256 | 250 | 9.26 | 34.17 | 2.05 | 26.45 | 159 | 0.74 |
| 190 | 10.16 | 33.93 | 3.04 | 191 | 300 | 8.90 | 34.27 | 1.29 | 26.58 | 146 | 0.82 |
| 235 | 9.36 | 34.11 | 2.37 | 165 | 400 | 7.91 | 34.34 | 0.54 | 26.79 | 127 | 0.96 |
| 280 | 9.06 | 34.25 | 1.50 | 150 | 500 | 6.76 | 34.38 | 0.35 | 26.98 | 108 | 1.09 |
| 377 | 8.23 | 34.33 | 0.61 | 132 | | | | | | | |
| 472 | 7.02 | 34.38 | 0.37 | 112 | | | | | | | |
| 573 | 6.16 | 34.35 | 0.34 | 103 | | | | | | | |
| CREST; November 14, 1952; 0439 GCT; 27°24'N, 114°39.5'W; sounding, 38 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | | 123.37 |
| 0 | 19.73 | 33.71 | 5.26 | 404 | 0 | 19.73 | 33.71 | 5.26 | 23.87 | 404 | 0.00 |
| 10 | 19.76 | 33.69 | 5.31 | 407 | 10 | 19.76 | 33.69 | 5.31 | 23.85 | 407 | 0.04 |
| 20 | 19.56 | 33.35u | 5.30 | | 20 | 19.56 | 33.66 | 5.30 | 23.88 | 404 | 0.08 |
| 30 | 16.72 | 33.60 | 5.81 | 342 | 30 | 16.72 | 33.60 | 5.81 | 24.53 | 342 | 0.12 |
| 50 | 14.82 | 33.64 | 4.89 | 298 | 50 | 14.82 | 33.64 | 4.89 | 24.98 | 298 | 0.18 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **123.40** | CREST; November 14, 1952; 0234 GCT; 27°18'N, 114°47'W; sounding, 250 fm; wind, 340°, force 4; weather, clear; sea, slight; wire angle, 24°. | | | | | | | | | | |
| 0 | 20.77 | 33.91 | 5.08 | 416 | 0 | 20.77 | 33.91 | 5.08 | 23.75 | 416 | 0.00 |
| 9 | 20.80 | 33.88 | 5.14 | 419 | 10 | 20.79 | 33.88 | 5.14 | 23.72 | 419 | 0.04 |
| 23 | 20.73 | 33.87 | 5.12 | 418 | 20 | 20.75 | 33.88 | 5.12 | 23.73 | 418 | 0.08 |
| 46 | 15.78 | 33.37 | 5.70 | 338 | 30 | 20.20 | 33.81 | 5.27 | 23.82 | 409 | 0.13 |
| 68 | 13.00 | 33.38 | 5.16 | 282 | 50 | 15.00 | 33.37 | 5.69 | 24.74 | 322 | 0.20 |
| 90 | 12.22 | 33.62 | 3.98 | 249 | 75 | 12.65 | 33.41 | 4.80 | 25.25 | 273 | 0.27 |
| 138 | 12.24 | 34.46 | 0.78 | 188 | 100 | 12.20 | 33.89 | 2.92 | 25.71 | 229 | 0.34 |
| 181 | 10.77 | 34.40 | 1.10 | 167 | 150 | 12.02 | 34.46 | 0.84 | 26.19 | 184 | 0.44 |
| 228 | 10.79 | 34.58 | 0.42 | 154 | 200 | 10.76 | 34.46 | 0.82 | 26.42 | 162 | 0.53 |
| 272 | 9.76 | 34.49 | 0.64 | 143 | 250 | 10.38 | 34.56 | 0.55 | 26.56 | 148 | 0.61 |
| 323 | 9.35 | 34.48 | 0.52 | 138 | 300 | 9.48 | 34.48 | 0.58 | 26.65 | 140 | 0.68 |
| **123.50** | CREST; November 13, 1952; 2145 GCT; 26°58'N, 115°31'W; sounding, 2000 fm; wind, 340°, force 4; weather, partly cloudy; sea, very rough; wire angle, 08°. | | | | | | | | | | |
| 0 | 19.94 | 33.71 | 5.41 | 410 | 0 | 19.94 | 33.71 | 5.41 | 23.82 | 410 | 0.00 |
| 10 | 19.93 | 33.72 | 5.43 | 409 | 10 | 19.93 | 33.72 | 5.43 | 23.83 | 409 | 0.04 |
| 20 | 19.88 | 33.62 | 5.44 | 415 | 20 | 19.88 | 33.62 | 5.44 | 23.76 | 415 | 0.08 |
| 35 | 19.52 | 33.62 | 5.47 | 406 | 30 | 19.80 | 33.62 | 5.45 | 23.78 | 413 | 0.12 |
| 55 | 14.81 | 33.33 | 5.99 | 321 | 50 | 16.30 | 33.40 | 5.83 | 24.47 | 347 | 0.20 |
| 69 | 12.32 | 33.49 | 4.44 | 261 | 75 | 11.85 | 33.53 | 4.05 | 25.50 | 249 | 0.27 |
| 83 | 11.28 | 33.56 | 3.82 | 237 | 100 | 10.36 | 33.66 | 3.56 | 25.87 | 214 | 0.33 |
| 106 | 10.20 | 33.71 | 3.46 | 208 | 150 | 9.68 | 34.08 | 2.38 | 26.31 | 172 | 0.43 |
| 130 | 9.86 | 33.95 | 2.86 | 185 | 200 | 8.87 | 34.17a) | 1.53 | 26.51 | 153 | 0.51 |
| 156 | 9.65 | 34.11 | 2.23 | 170 | 250 | 9.40 | 34.41a) | 1.23 | 26.61 | 144 | 0.59 |
| 206 | 9.40b) | 34.29 | 1.49 | 152 | 300 | 8.51 | 34.37 | 0.67 | 26.72 | 133 | 0.66 |
| 261 | 8.68 | 34.29 | 1.13 | 141 | 400 | 7.67 | 34.39 | 0.36 | 26.86 | 120 | 0.79 |
| 308 | 8.46 | 34.38 | 0.60 | 132 | 500 | 6.58 | 34.43 | 0.30 | 27.05 | 102 | 0.91 |
| 416 | 7.50 | 34.39 | 0.34 | 117 | 600 | 5.84 | 34.38 | 0.27 | 27.10 | 97 | 1.02 |
| 521 | 6.37 | 34.43 | 0.27 | 99 | | | | | | | |
| 630 | 5.70 | 34.37 | 0.28 | 96 | | | | | | | |
| **127.34** | CREST; November 14, 1952; 1605 GCT; 26°55.5'N, 114°06'W; sounding, 40 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 19.96 | 33.76 | 5.26 | 406 | 0 | 19.96 | 33.76 | 5.26 | 23.85 | 406 | 0.00 |
| 10 | 19.94 | 33.73 | 5.28 | 408 | 10 | 19.94 | 33.73 | 5.28 | 23.83 | 408 | 0.04 |
| 20 | 19.84 | 33.78 | 5.25 | 402 | 20 | 19.84 | 33.78 | 5.25 | 23.89 | 402 | 0.08 |
| 30 | 17.04 | 33.60 | 5.05 | 349 | 30 | 17.04 | 33.60 | 5.05 | 24.45 | 349 | 0.12 |
| 50 | 13.91 | 33.62 | 4.14 | 281 | 50 | 13.91 | 33.62 | 4.14 | 25.16 | 281 | 0.18 |
| **127.40** | CREST; November 14, 1952; 1917 GCT; 26°43.5'N, 114°29.5'W; sounding, 1750 fm; wind, 350°, force 3; weather, partly cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | 20.90 | 33.74 | 5.07 | 432 | 0 | 20.90 | 33.74 | 5.07 | 23.58 | 432 | 0.00 |
| 10 | 20.80 | 33.76 | 5.07 | 428 | 10 | 20.80 | 33.76 | 5.07 | 23.63 | 428 | 0.04 |
| 20 | 20.77 | 33.73 | 5.12 | 429 | 20 | 20.77 | 33.73 | 5.12 | 23.61 | 429 | 0.09 |
| 35 | 16.32 | 33.37 | 6.01 | 350 | 30 | 20.72 | 33.72 | 5.90 | 23.62 | 428 | 0.13 |
| 50 | 15.34 | 33.43 | 5.92 | 324 | 50 | 15.34 | 33.43 | 5.92 | 24.71 | 324 | 0.20 |
| 64 | 14.05 | 33.35 | 5.69 | 304 | 75 | 12.77 | 33.31 | 5.05 | 25.15 | 282 | 0.28 |
| 79 | 12.56 | 33.30 | 4.94 | 279 | | | | | | | |
| 97c) | 11.24 | 33.51 | 4.09 | 240 | | | | | | | |
| 120 | 11.56 | 33.99 | 2.49 | 210 | | | | | | | |
| 146 | 11.72 | 34.19 | 1.74 | 198 | | | | | | | |
| 190 | 10.90 | 34.41 | 1.07 | 168 | | | | | | | |
| 234 | 10.66 | 34.52 | 0.63 | 156 | | | | | | | |
| 280 | 10.04d) | 34.60 | 0.46 | 140 | | | | | | | |
| 379 | 8.63 | 34.42 | 0.25 | 131 | | | | | | | |
| 477 | 7.46 | 34.41 | 0.26 | 115 | | | | | | | |
| 580 | 6.24 | 34.41 | 0.24 | 99 | | | | | | | |

a) The temperature inversion indicated by the bathythermograph observation accounts for these salinity values.
b) Temperatures of 8.8°C at 195 meters and 10.0°C at 220 meters indicated by bathythermograph.
c) Possible posttrip beginning at this depth.
d) Alternate value, 10.11°C.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

CREST; November 15, 1952; 0038 GCT; 26°23'N, 115°08'W; sounding, 2000 fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 08°. 127.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.68 | 33.74 | 5.16 | 426 | 0 | 20.68 | 33.74 | 5.16 | 23.64 | 426 | 0.00 |
| 10 | 20.72 | 33.75 | 5.21 | 426 | 10 | 20.72 | 33.75 | 5.21 | 23.64 | 426 | 0.04 |
| 20 | 20.70 | 33.67 | 5.17 | 432 | 20 | 20.70 | 33.67 | 5.17 | 23.58 | 432 | 0.09 |
| 35 | 15.46 | 33.45 | 6.02 | 325 | 30 | 16.53 | 33.49 | 5.94 | 24.49 | 346 | 0.12 |
| 55 | 13.68 | 33.52 | 5.06 | 284 | 50 | 14.34 | 33.51 | 5.42 | 24.99 | 298 | 0.19 |
| 69 | 11.74 | 33.51 | 4.28 | 249 | 75 | 11.30 | 33.53 | 4.08 | 25.60 | 240 | 0.26 |
| 84 | 10.95 | 33.59 | 3.81 | 229 | 100 | 10.85 | 33.78 | 3.11 | 25.87 | 214 | 0.31 |
| 109 | 10.78 | 33.87 | 2.89 | 206 | 150 | 10.45 | | 1.79 | | | |
| 133 | 10.26 | 34.03 | 2.54 | 185 | 200 | 10.48 | | 0.63 | | | |
| 160 | 10.58 | 33.96u | 1.37 | 196 | 250 | 9.91 | | 0.45 | | | |
| 211 | 10.38 | 34.14u | 1.54 | 179 | 300 | 9.21 | | 0.40 | | | |
| 267 | 9.68 | 34.14u | 0.41 | 168 | 400 | 7.82 | | 0.30 | | | |
| 313 | 9.00 | 34.48 | 0.36 | 132 | 500 | 6.87 | | 0.23 | | | |
| 420 | 7.58 | 34.45 | 0.29 | 114 | 600 | 6.01 | | 0.23 | | | |
| 525 | 6.64 | 34.51 | 0.20 | 97 | | | | | | | |
| 633 | 5.73 | 34.44 | 0.24 | 91 | | | | | | | |

CREST; November 15, 1952; 2250 GCT; 26°29'N, 113°29'W; sounding, 44 fm; wind, 350°, force 4; weather, cloudy; sea, rough; wire angle, 03°. 130.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.92 | 33.80 | 5.17 | 428 | 0 | 20.92 | 33.80 | 5.17 | 23.62 | 428 | 0.00 |
| 10 | 20.60 | 33.76 | 5.23 | 423 | 10 | 20.60 | 33.76 | 5.23 | 23.68 | 423 | 0.04 |
| 20 | 18.53 | 33.69 | 5.36 | 377 | 20 | 18.53 | 33.69 | 5.36 | 24.16 | 377 | 0.08 |
| 30 | 16.82 | 33.56 | 5.13 | 347 | 30 | 16.82 | 33.56 | 5.13 | 24.47 | 347 | 0.12 |
| 50 | 14.28 | 33.33 | 5.64 | 310 | 50 | 14.28 | 33.33 | 5.64 | 24.86 | 310 | 0.18 |

CREST; November 15, 1952; 2014 GCT; 26°19'N, 113°49'W; sounding, 180 fm; wind, 360°, force 1; weather, cloudy; sea, moderate; wire angle, 01°. 130.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.56 | 33.74 | 5.06 | 449 | 0 | 21.56 | 33.74 | 5.06 | 23.40 | 449 | 0.00 |
| 10 | 21.28 | 33.72 | 5.04 | 443 | 10 | 21.28 | 33.72 | 5.04 | 23.47 | 443 | 0.04 |
| 20 | 21.26 | 33.75 | 5.08 | 440 | 20 | 21.26 | 33.75 | 5.08 | 23.49 | 440 | 0.09 |
| 30 | 21.21 | 33.70 | 5.07 | 443 | 30 | 21.21 | 33.70 | 5.07 | 23.47 | 443 | 0.13 |
| 50 | 16.16 | 33.39 | 5.85 | 345 | 50 | 16.16 | 33.39 | 5.85 | 24.49 | 345 | 0.21 |
| 75 | 14.01 | 33.47 | 5.34 | 294 | 75 | 14.01 | 33.47 | 5.34 | 25.02 | 294 | 0.29 |
| 100 | 13.10 | 34.01 | 2.91 | 237 | 100 | 13.10 | 34.01 | 2.91 | 25.63 | 237 | 0.36 |

CREST; November 15, 1952; 1712 GCT; 26°14.5'N, 114°10.5'W; sounding, 1260 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 06°. 130.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.58 | 33.81 | 5.00 | 444 | 0 | 21.58 | 33.81 | 5.00 | 23.45 | 444 | 0.00 |
| 10 | 21.59 | 33.68 | 5.01 | 454 | 10 | 21.59 | 33.68 | 5.01 | 23.35 | 454 | 0.04 |
| 25 | 21.50 | 33.78 | 5.04 | 444 | 20 | 21.53 | 33.77 | 5.03 | 23.44 | 446 | 0.09 |
| 50 | 17.42 | 33.43 | 5.78 | 370 | 30 | 20.17 | 33.77 | 5.15 | 23.80 | 411 | 0.13 |
| 74 | 14.14 | 33.34 | 5.85 | 307 | 50 | 17.42 | 33.43 | 5.78 | 24.23 | 370 | 0.21 |
| 98 | 11.88 | 33.54 | 4.37 | 249 | 75 | 14.10 | 33.34 | 5.84 | 24.90 | 306 | 0.30 |
| 151 | 10.50 | 33.88 | 2.86 | 200 | 100 | 11.78 | 33.55 | 4.31 | 25.53 | 247 | 0.37 |
| 198 | 10.56 | 34.40 | 1.43 | 163 | 150 | 10.52 | 33.86 | 2.92 | 25.99 | 202 | 0.48 |
| 246 | 9.28 | 34.27 | 1.49 | 152 | 200 | 10.55 | 34.40 | 1.44 | 26.41 | 163 | 0.57 |
| 290 | 8.96 | 34.40 | 0.97 | 137 | 250 | 9.25 | 34.27 | 1.46 | 26.53 | 152 | 0.65 |
| 388 | 8.37 | 34.44 | 0.34 | 126 | 300 | 8.92 | 34.41 | 0.90 | 26.69 | 136 | 0.73 |
| 480 | 7.63 | 34.44 | 0.18 | 115 | 400 | 8.28 | 34.44 | 0.32 | 26.81 | 124 | 0.86 |
| 578 | 6.23 | 34.47 | 0.21 | 95 | 500 | 7.47 | 34.45 | 0.18 | 26.94 | 112 | 0.99 |
| 670 | 5.54 | 34.49 | 0.21 | 85 | 600 | 6.04 | 34.48 | 0.22 | 27.16 | 92 | 1.10 |
| 770 | 5.04 | 34.49 | 0.26 | 79 | 700 | 5.39 | 34.49 | 0.23 | 27.25 | 83 | 1.20 |
| 963 | 4.20 | 34.49 | 0.49 | 71 | 800 | 4.89 | 34.49 | 0.26 | 27.31 | 78 | 1.29 |
| | | | | | 1000 | (4.07) | (34.49) | (0.56) | (27.40) | (69) | (1.45) |

S10

CCOFI 5211

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

130.50 CREST; November 15, 1952; 1201 GCT; 25°50'N, 114°46'W; sounding, 1820 fm; wind, 330°, force 4; weather, partly cloudy; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.62 | 33.75 | 5.09 | 424 | 0 | 20.62 | 33.75 | 5.09 | 23.67 | 424 | 0.00 |
| 10 | 20.62 | 33.75 | 5.11 | 424 | 10 | 20.62 | 33.75 | 5.11 | 23.67 | 424 | 0.04 |
| 20 | 18.87 | 33.65 | - | 388 | 20 | 18.87 | 33.65 | 5.12 | 24.04 | 388 | 0.08 |
| 35 | 14.06 | 33.42 | 5.34 | 299 | 30 | 15.20 | 33.46 | 5.29 | 24.76 | 319 | 0.12 |
| 50 | 13.01 | 33.55 | 4.53 | 269 | 50 | 13.01 | 33.55 | 4.53 | 25.29 | 269 | 0.18 |
| 64 | 12.64 | 33.67 | 4.02 | 253 | 75 | 11.40 | 33.52 | 3.95 | 25.57 | 242 | 0.24 |
| 79 | 11.26 | 33.50 | 3.91 | 241 | 100 | 10.71 | 33.71 | 3.25 | 25.84 | 216 | 0.30 |
| 98 | 10.78 | 33.68 | 3.30 | 220 | 150 | 10.01 | 34.24 | 1.71 | 26.38 | 166 | 0.40 |
| 121 | 10.29 | 34.01 | 2.47 | 187 | 200 | 9.62 | 34.31 | 0.99 | 26.50 | 154 | 0.48 |
| 149 | 10.03 | 34.23 | 1.73 | 167 | 250 | 9.28 | 34.40 | 0.52 | 26.62 | 142 | 0.55 |
| 194 | 9.63 | 34.30 | 1.09 | 155 | 300 | 8.70 | 34.46 | 0.43 | 26.76 | 129 | 0.63 |
| 241 | 9.39 | 34.39 | 0.54 | 145 | 400 | 7.73 | 34.48 | 0.23 | 26.93 | 114 | 0.75 |
| 288 | 8.81 | 34.45 | 0.46 | 132 | 500 | 6.70 | 34.41 | 0.22 | 27.02 | 105 | 0.87 |
| 387 | 7.87 | 34.49 | 0.23 | 115 | 600 | (5.81) | (34.45) | | (27.16) | (91) | (0.98) |
| 483 | 6.86 | 34.41 | 0.21 | 107 | | | | | | | |
| 585 | 5.92 | 34.44 | 0.25 | 93 | | | | | | | |

130.60 CREST; November 15, 1952; 0652 GCT; 25°29'N, 115°23.5'W; sounding, 2000 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.06 | 33.75 | 5.34 | 410 | 0 | 20.06 | 33.75 | 5.34 | 23.81 | 410 | 0.00 |
| 9 | 20.10 | 33.81 | 5.35 | 406 | 10 | 20.10 | 33.81 | 5.36 | 23.85 | 406 | 0.04 |
| 23 | 19.09 | 33.60 | 5.50 | 397 | 20 | 19.41 | 33.69 | 5.46 | 23.94 | 398 | 0.08 |
| 48 | 15.91 | 33.27 | 5.96 | 348 | 30 | 18.16 | 33.50 | 5.64 | 24.11 | 382 | 0.12 |
| 71 | 13.26 | 33.19 | 5.91 | 300 | 50 | 15.75 | 33.26 | 5.98 | 24.49 | 345 | 0.19 |
| 92 | 11.28 | 33.21 | 5.40 | 263 | 75 | 12.64 | 33.19 | 5.89 | 25.08 | 289 | 0.27 |
| 139 | 10.15 | 33.74 | 3.10 | 205 | 100 | 10.50 | 33.24 | 5.09 | 25.51 | 248 | 0.34 |
| 177 | 10.20 | 34.24 | 1.64 | 169 | 150 | 9.90 | 33.92 | 2.48 | 26.15 | 188 | 0.45 |
| 217 | 9.55 | 34.36 | 1.25 | 150 | 200 | 9.82 | 34.31 | 1.41 | 26.46 | 158 | 0.54 |
| 256 | 9.28 | 34.47 | 0.89 | 137 | 250 | 9.32 | 34.46 | 0.94 | 26.66 | 139 | 0.62 |
| 339 | 8.66 | 34.45 | 0.40 | 129 | 300 | 8.98 | 34.46 | 0.59 | 26.72 | 133 | 0.69 |
| 420 | 7.80 | 34.49 | 0.28 | 114 | 400 | 7.99 | 34.48 | 0.31 | 26.89 | 117 | 0.82 |
| 504 | 7.10 | 34.50 | 0.18 | 104 | 500 | 7.16 | 34.50 | 0.20 | 27.02 | 104 | 0.94 |
| 583 | 6.19 | 34.48 | 0.18 | 94 | 600 | 6.06 | 34.48 | 0.20 | 27.16 | 92 | 1.05 |
| 666 | 5.58 | 34.48 | 0.21 | 86 | 700 | 5.36 | 34.48 | 0.23 | 27.24 | 84 | 1.14 |
| 836 | 4.56 | 34.47 | 0.40 | 76 | 800 | 4.78 | 34.47 | 0.34 | 27.30 | 78 | 1.23 |
| | | | | | 1000 | (3.75) | (34.47) | | (27.41) | (68) | (1.40) |

133.25 CREST; November 16, 1952; 0332 GCT; 26°05'N, 112°48'W; sounding, 40 fm; wind, 310°, force 5; weather, partly cloudy; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.87 | 33.84 | 5.08 | 424 | 0 | 20.87 | 33.84 | 5.08 | 23.67 | 424 | 0.00 |
| 10 | 20.87 | 33.83 | 5.13 | 424 | 10 | 20.87 | 33.83 | 5.13 | 23.66 | 424 | 0.04 |
| 20 | 20.70 | 33.82 | 5.17 | 421 | 20 | 20.70 | 33.82 | 5.17 | 23.70 | 421 | 0.08 |
| 30 | 17.76 | 33.71 | 5.46 | 357 | 30 | 17.76 | 33.71 | 5.46 | 24.36 | 357 | 0.12 |
| 50 | 15.45 | 33.64 | 5.28 | 311 | 50 | 15.45 | 33.64 | 5.28 | 24.85 | 311 | 0.19 |

133.30 CREST; November 16, 1952; 0605 GCT; 25°54.5'N, 113°07.5'W; sounding, 103 fm; wind, 300°, force 4; weather, clear; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.37 | 33.93 | 5.12 | 430 | 0 | 21.37 | 33.93 | 5.12 | 23.60 | 430 | 0.00 |
| 10 | 21.37 | 33.94 | 5.10 | 429 | 10 | 21.37 | 33.94 | 5.10 | 23.61 | 429 | 0.04 |
| 20 | 21.38 | 33.98 | 5.12 | 427 | 20 | 21.38 | 33.98 | 5.12 | 23.64 | 427 | 0.09 |
| 30 | 19.63 | 33.71 | 5.36 | 402 | 30 | 19.63 | 33.71 | 5.36 | 23.90 | 402 | 0.13 |
| 49 | 15.91 | 33.58 | 5.43 | 326 | 50 | 15.90 | 33.58 | 5.43 | 24.70 | 325 | 0.20 |
| 73 | 13.84 | 33.77 | 4.10 | 269 | 75 | 13.75 | 33.78 | 3.98 | 25.32 | 267 | 0.27 |
| 96 | 13.14 | 33.99 | 2.64 | 239 | 100 | 13.06 | 34.07 | 2.25 | 25.68 | 232 | 0.34 |
| 119 | 12.75 | 34.35 | 1.17 | 206 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| CREST; November 16, 1952; 1335 GCT; 25°34'N, 112°19'W; sounding, 40 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | | 137.23 |
| 0 | 22.02 | 34.01 | 5.01 | 441 | 0 | 22.02 | 34.01 | 5.01 | 23.48 | 441 | 0.00 |
| 10 | 22.04 | 33.91 | 4.98 | 449 | 10 | 22.04 | 33.91 | 4.98 | 23.40 | 449 | 0.04 |
| 20 | 22.04 | 33.95 | 4.99 | 446 | 20 | 22.04 | 33.95 | 4.99 | 23.43 | 446 | 0.09 |
| 30 | 22.04 | 33.93 | 5.00 | 448 | 30 | 22.04 | 33.93 | 5.00 | 23.42 | 448 | 0.13 |
| 50 | 17.53 | 33.89 | 4.94 | 339 | 50 | 17.53 | 33.89 | 4.94 | 24.56 | 339 | 0.21 |
| CREST; November 16, 1952; 1022 GCT; 25°20'N, 112°45.5'W; sounding, 175 fm; wind, 340°, force 4; weather, partly cloudy; sea, slight; wire angle, 09°. | | | | | | | | | | | 137.30 |
| 0 | 21.53 | 33.91 | 5.06 | 436 | 0 | 21.53 | 33.91 | 5.06 | 23.54 | 436 | 0.00 |
| 10 | 21.56 | 33.84 | 5.11 | 442 | 10 | 21.56 | 33.84 | 5.11 | 23.48 | 442 | 0.04 |
| 25 | 21.58 | 33.93 | 5.07 | 436 | 20 | 21.57 | 33.93 | 5.07 | 23.55 | 435 | 0.09 |
| 49 | 16.92 | 33.72 | 5.73 | 337 | 30 | 21.59 | 33.93 | 5.10 | 23.54 | 436 | 0.13 |
| 73 | 14.28 | 33.71 | 4.54 | 282 | 50 | 16.75 | 33.72 | 5.74 | 24.61 | 334 | 0.21 |
| 97 | 13.80 | 34.22 | 2.55 | 235 | 75 | 14.24 | 33.71 | 4.30 | 25.16 | 281 | 0.29 |
| 149 | 12.42 | 34.60 | 0.92 | 181 | 100 | 13.72 | 34.28 | 2.42 | 25.71 | 229 | 0.35 |
| 197 | 11.54 | 34.75 | 0.18 | 154 | 150 | 12.40 | 34.60 | 0.91 | 26.22 | 181 | 0.45 |
| | | | | | 200 | (11.49) | (34.76) | (0.17) | (26.52) | (152) | (0.54) |

SIO/IATTC

SHELLBACK

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| HORIZON; May 18, 1952; 1945, 2022, 2325 GCT; 30°44'N, 118°23.5'W; sounding, 1320 fm; wind, 280°, force 3; weather, overcast; sea, moderate; wire angle, 22°, 35°, 40°. | | | | | | | | | 1 |
| 0 | 15.72 | - | 0.56 | 2.0 | 0 | 15.72 | | 0.56 | 2.0 |
| 9 | 15.62 | 5.72 | 0.58 | 1.2 | 10 | 15.61 | 5.72 | 0.58 | 1.2 |
| 23 | 15.59 | 5.73 | 0.58 | 1.3 | 20 | 15.60 | 5.73 | 0.58 | 1.3 |
| 37 | 15.24 | 5.80 | 0.56 | 1.4 | 30 | 15.52 | 5.76 | 0.57 | 1.4 |
| 55 | 12.04 | 5.64 | 0.82 | 6.5 | 50 | 13.84 | 5.74 | 0.73 | 3.5 |
| 72 | 10.82 | 4.49 | 1.38 | 14.1 | 75 | 10.74 | 4.44 | 1.42 | 15 |
| 90 | 10.46 | 4.04 | 1.58 | 17.8 | 100 | 10.15 | 3.71 | 1.68 | 21 |
| 139 | 9.00 | 3.04 | 2.05a) | 30.3 | 150 | 8.83 | 2.97 | 2.17 | 32 |
| 184 | 8.42 | 2.79 | - | - | 200 | 8.28 | 2.49 | 2.31 | 39 |
| | | | | | 250 | 8.00 | 1.68 | 2.50 | 47 |
| 217 | 8.18 | 2.20 | 2.41 | 41.9 | 300 | 7.66 | 1.16 | | 55 |
| 259 | 7.94 | 1.58 | 2.53 | 48.6 | 400 | 6.92 | 0.61 | | 64 |
| 352 | 7.23 | 0.82 | 2.98 | 61.7 | 500 | 6.21 | 0.30 | | 77 |
| 441 | 6.62 | 0.52 | 3.03 | 66.7u | 600 | 5.57 | 0.30 | | |
| 540 | 5.95 | - | 3.07 | 83.6 | 700 | 5.07 | 0.24 | | |
| | | | | | 800 | 4.67 | 0.30 | | |
| 424b) | 6.83 | 0.44 | 2.65c) | - | 1000 | 3.96 | 0.51 | | |
| 511 | 6.14 | 0.27 | 2.74d) | - | 1200 | 3.41 | 0.52 | | |
| 553 | 5.87 | 0.29 | 2.71e) | - | 1500 | 2.29 | 0.66 | | |
| 596 | 5.60 | 0.31 | 2.76 | - | | | | | |
| 639 | 5.34 | 0.20 | 2.83 | - | | | | | |
| 683 | 5.14 | 0.25 | 2.80 | - | | | | | |
| 772 | 4.78 | 0.23 | 2.90f) | - | | | | | |
| 861 | 4.40 | 0.51u | - | - | | | | | |
| 1043 | 3.83 | - | 2.86 | - | | | | | |
| 1324 | 3.18 | 0.52 | 2.45u | - | | | | | |
| 1829 | 2.28 | 1.21 | 2.50 | - | | | | | |
| HORIZON; May 19, 1952; 0935 GCT; 29°17'N, 119°21'W; sounding, 1790 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 14°. | | | | | | | | | 2 |
| 0 | 16.93 | 5.56 | | | 0 | 16.93 | 5.56 | | |
| 8 | 16.94 | 5.55 | | | 10 | 16.94 | 5.56 | | |
| 23 | 16.95 | 5.59 | | | 20 | 16.95 | 5.58 | | |
| 37 | 16.88 | 5.61 | | | 30 | 16.93 | 5.60 | | |
| 57 | 16.06 | 5.76 | | | 50 | 16.70 | 5.70 | | |
| 77 | 14.66 | 5.87 | | | 75 | 14.67 | 5.86 | | |
| 95 | 14.56 | 5.97 | | | 100 | 14.49 | 5.93 | | |
| 143 | 10.72 | 4.79 | | | 150 | 10.37 | 4.65 | | |
| 189 | 9.31 | 3.78 | | | 200 | 9.13 | 3.63 | | |
| 232 | 8.84 | 3.41 | | | 250 | 8.41 | 2.96 | | |
| 276 | 8.10 | 2.60 | | | 300 | 7.82 | 2.26 | | |
| 367 | 7.08 | 1.37 | | | 400 | 6.94 | 0.94 | | |
| 454 | 6.82 | 0.44 | | | 500 | 6.52 | 0.40 | | |
| 547 | 5.76 | 0.39 | | | | | | | |

a) Alternate value, 2.13 µg at/L, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Alternate value, 2.52 µg at/L.
d) Alternate value, 2.60 µg at/L.
e) Alternate value, 3.16 µg at/L.
f) Alternate value, 2.82 µg at/L.

HORIZON; May 19-20, 1952; 2142, 2213, 0004 GCT; 27°48'N, 120°14'W; sounding, 2165 fm; wind, 270°, force 3; weather, overcast; sea, moderate; wire angle, 11°, 10°, 15°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 17.62 | 5.53 | 0.51 | 0.1 | 0 | 17.62 | 5.53 | 0.51 | 0.1 |
| 9 | 17.30 | 5.53 | 0.48 | 0 | 10 | 17.29 | 5.54 | 0.48 | 0 |
| 24 | 17.26 | 5.59 | 0.48 | 0 | 20 | 17.27 | 5.57 | 0.48 | 0 |
| 38 | 16.94 | 5.58 | 0.48 | 0 | 30 | 17.22 | 5.58 | 0.48 | 0 |
| 57 | 16.39 | 5.63 | 0.48 | 0 | 50 | 15.59 | 5.60 | 0.48 | 0 |
| 76 | 15.78 | 5.68 | 0.56 | 0 | 75 | 15.79 | 5.68 | 0.56 | 0 |
| 94 | 15.70 | 5.55 | 0.56 | 0 | 100 | 15.67 | 5.49 | 0.57 | 0.4 |
| 145 | 12.51 | 4.13 | 1.30 | 7.1 | 150 | 12.36 | 3.96 | 1.40 | 8.2 |
| 190 | 11.27 | 2.03 | 2.15 | 19.8 | 200 | 10.94 | 1.80 | 2.18 | 22 |
| | | | | | 250 | 9.82 | 1.31 | 2.33 | 28 |
| 238 | 9.88 | 2.04 | 2.28 | 27.3 | 300 | 9.68 | 1.07 | 2.66 | 29 |
| 283 | 9.76 | 1.17 | 2.60a) | 28.6 | 400 | 8.26 | 0.51 | 2.81 | 41 |
| 383 | 8.50 | 0.54 | 2.81 | 39.4 | 500 | 6.99 | 0.37 | 2.85 | 50 |
| 475 | 7.28 | 0.40 | 2.82 | 48.4 | 600 | 6.12 | 0.26 | 3.03 | 61 |
| 575 | 6.24 | 0.31 | 3.00 | 59.0 | 700 | 5.58 | 0.24 | 3.09 | 72 |
| | | | | | 800 | 4.97 | 0.30 | 3.22 | 77 |
| 509b) | 7.02 | 0.37 | 2.82c) | 50.8 | 1000 | 4.18 | 0.48 | 3.20 | 90 |
| 603 | 6.16 | 0.26 | 3.02d) | 60.8 | 1200 | 3.64 | 0.66 | 3.33 | 99 |
| 651 | 5.86 | 0.23 | 3.04 | 66.6 | | | | | |
| 699 | 5.60 | 0.24 | 3.15e) | 72.2f) | | | | | |
| 747 | 5.22 | 0.28 | 3.16 | 74.5g) | | | | | |
| 796 | 5.00 | 0.29 | 3.21 | 76.9 | | | | | |
| 896 | 4.54 | 0.43 | 3.14 | 83.7 | | | | | |
| 1000 | 4.18 | 0.48 | 3.20 | 91.8 | | | | | |
| 1209 | 3.62 | 0.69 | 3.02 | 99.9 | | | | | |

a) Alternate value, 2.75 µg at/L, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Alternate value, 2.74 µg at/L, not used in interpolation.
d) Mean value of 2.98 and 3.05 µg at/L.
e) Alternate value, 3.24 µg at/L, not used in interpolation.
f) Alternate value, 79.4 µg at/L, not used in interpolation.
g) Alternate value, 86.0 µg at/L, not used in interpolation.

HORIZON; May 20, 1952; 1211, 1359 GCT; 26°07'N, 121°16'W; sounding, 2270 fm; wind, 310°, force 4; weather, overcast; sea, moderate; wire angle, 10°, 07°. 4

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 18.00 | 5.47 | 0.43a) | | 0 | 18.00 | 5.47 | 0.43 | |
| 10 | 17.98 | 5.49 | 0.44 | | 10 | 17.98 | 5.49 | 0.44 | |
| 25 | 17.50 | 5.58 | 0.40 | | 20 | 17.96 | 5.58 | 0.42 | |
| 39 | 16.42 | 5.72 | 0.40 | | 30 | 16.90 | 5.61 | 0.40 | |
| 58 | 16.08 | 5.69 | 0.42 | | 50 | 16.17 | 5.69 | 0.41 | |
| 78 | 15.93 | 5.66 | 0.45 | | 75 | 15.95 | 5.67 | 0.45 | |
| 97 | 15.69 | 5.65 | 0.43 | | 100 | 15.65 | 5.64 | 0.44 | |
| 148 | 11.14 | 4.92 | 1.02 | | 150 | 11.11 | 4.87 | 1.04 | |
| 195 | 9.76 | 3.73 | 1.59 | | 200 | 9.55 | 3.64 | 1.64 | |
| 241 | 8.89 | 3.06 | 1.94 | | 250 | 8.82 | 2.85 | 2.01 | |
| 287 | 8.42 | 2.08 | 2.32b) | | 300 | 8.17 | 1.92 | 2.41 | |
| 384 | 7.08 | 1.13 | 2.72 | | 400 | 6.97 | 1.03 | | |
| 478 | 6.48 | 0.48 | 2.90 | | 500 | 6.29 | 0.43 | | |
| 577 | 5.72 | 0.29 | 3.12 | | 600 | 5.63 | 0.27 | | |
| | | | | | 700 | 5.14 | 0.33 | | |
| 512c) | 6.05 | 0.42 | 2.80d) | | 800 | 4.66 | 0.34 | | |
| 615 | 5.54 | 0.26 | 2.84 | | 1000 | 4.07 | 0.47 | | |
| 668 | 5.24 | 0.33 | 2.83 | | 1200 | 3.51 | 0.66 | | |
| 720 | 5.05 | 0.33 | 2.92 | | 1500 | 3.04 | 1.04 | | |
| 772 | 4.78 | 0.33 | 2.88e) | | 2000 | 2.12 | 1.73 | | |
| 823 | 4.59 | 0.36 | 3.08 | | | | | | |
| 927 | 4.27 | 0.43 | 2.97 | | | | | | |
| 1031 | 3.97 | 0.50 | 3.02f) | | | | | | |
| 1240 | 3.42 | 0.71 | 2.85 | | | | | | |
| 1558 | 2.74 | 1.13 | 2.88 | | | | | | |
| 2098 | 2.04 | 1.85 | 2.70 | | | | | | |

HORIZON; May 20, 1952; 2046 GCT; 25°18'N, 121°44'W; sounding, 2270 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 10°. 5

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 18.66 | 5.40 | 0 | 18.66 | 5.40 | |
| 10 | 18.42 | 5.42 | 10 | 18.42 | 5.42 | |
| 24 | 18.40 | 5.43 | 20 | 18.40 | 5.43 | |
| 48 | 17.58 | 5.51 | 30 | 18.36 | 5.44 | |
| 72 | 17.23 | 5.51 | 50 | 17.56 | 5.51 | |
| 96 | 17.09 | 5.48 | 75 | 17.18 | 5.50 | |
| 148 | 13.56 | 4.84 | 100 | 17.07 | 5.45 | |
| 195 | 10.78 | 4.17 | 150 | 13.35 | 4.81 | |
| 241 | 9.71 | 3.65 | 200 | 10.59 | 4.07 | |
| 288 | 8.30 | 2.93 | 250 | 8.92 | 3.33 | |
| 385 | 7.32 | 1.02 | 300 | 8.15 | 2.64 | |
| 478 | 6.72 | 0.43 | 400 | 7.22 | 0.87 | |
| 573 | 5.93 | 0.33 | 500 | 6.54 | 0.39 | |
| 766 | 5.03 | 0.33 | 600 | 5.76 | 0.33 | |
| 955 | 4.24 | 0.50 | 700 | 5.30 | 0.33 | |
| 1152 | 3.62 | 0.65 | 800 | 4.90 | 0.36 | |
| | | | 1000 | 4.07 | 0.53 | |

a) Alternate value, 0.35 µg at/L, not used in interpolation.
b) Mean value of 2.28 and 2.37 µg at/L.
c) Overlapping casts; reconciliation of property curves when necessary.
d) Mean value of 2.77 and 2.84 µg at/L.
e) Mean value of 2.84 and 2.92 µg at/L.
f) Alternate value, 2.94 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 6 | HORIZON; May 21, 1952; 0440, 0607 GCT; 24°17.5'N, 122°29'W; sounding, 2310 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 15°, 24°. | | | | | | | | |
| 0 | 19.38 | 5.37 | 0.37 | 0.9 | 0 | 19.38 | 5.37 | 0.37 | 0.9 |
| 9 | 19.34 | 5.38 | 0.34 | 0.9 | 10 | 19.33 | 5.38 | 0.34 | 1.0 |
| 24 | 19.04 | 5.43 | 0.37 | 2.2 | 20 | 19.20 | 5.42 | 0.35 | 2.0 |
| 38 | 18.86 | 5.40 | 0.33 | 1.3 | 30 | 18.97 | 5.42 | 0.36 | 2.0 |
| 57 | 18.04 | 5.53 | 0.35 | 2.3 | 50 | 18.30 | 5.45 | 0.34 | 1.5 |
| 76 | 17.46 | 5.59 | 0.36 | 6.5 | 75 | 17.47 | 5.59 | 0.36 | 6.4 |
| 94 | 17.12 | 5.61 | 0.38 | 3.1 | 100 | 17.16 | 5.58 | 0.39 | 3.0 |
| 143 | 15.28 | 5.15 | 0.51 | 2.9 | 150 | 14.60 | 5.03 | 0.54 | 4.0 |
| 187 | 11.60 | 4.32 | 1.12 | 12.1 | 200 | 11.00 | 4.02 | 1.40 | 16 |
| 232 | 10.00 | 2.89 | 1.82 | 26.3 | 250 | 9.68 | 2.41 | 2.02 | 31 |
| 276 | 9.32 | 1.85 | 2.28 | 36.5 | 300 | 9.12 | 1.54 | 2.43 | 45 |
| 372 | 8.40 | 0.83 | 2.68 | 50.2 | 400 | 7.91 | 0.69 | 2.73 | 67 |
| 463 | 6.94 | 0.49 | 2.80 | 65.3 | 500 | 6.65 | 0.42 | 2.86 | 69 |
| 561 | 6.18 | 0.33 | 2.95 | 78.3 | 600 | 5.86 | 0.30 | 2.97 | 83 |
| | | | | | 700 | 5.31 | 0.31 | 2.98 | 92 |
| 461a) | 6.82 | 0.48 | 2.72 | 65.9 | 800 | 4.86 | 0.37 | 3.03 | 99 |
| 558 | 6.14 | 0.31 | 2.84b) | 77.2 | 1000 | 4.16 | 0.53 | 3.06 | 115 |
| 656 | 5.48 | 0.30 | 2.98 | 88.0 | 1200 | 3.54 | 0.66 | 2.97 | 129 |
| 705 | 5.28 | 0.31 | 2.98 | 92.2 | 1500 | 2.85 | 1.11 | 2.92 | 146 |
| 753 | 5.10 | 0.34 | 3.00 | 95.6 | 2000 | 2.14 | 1.74 | 2.71 | 157 |
| 802 | 4.86 | 0.37 | 3.04c) | 99.5 | 2500 | (1.82) | (2.20) | (2.60) | (161) |
| 850 | 4.71 | 0.32 | 3.10 | 104.4 | | | | | |
| 948 | 4.33 | 0.45 | 3.06 | 110.9 | | | | | |
| 1142 | 3.71 | 0.60 | 2.98 | 125.1 | | | | | |
| 1440 | 2.98 | 1.00 | 2.94 | 142.9 | | | | | |
| 1958 | 2.19 | 1.69 | 2.73 | 156.1 | | | | | |
| 2496 | 1.82 | 2.19 | 2.60 | 161.1 | | | | | |
| 7 | HORIZON; May 21, 1952; 1239, 1305 GCT; 23°30'N, 122°55'W; sounding, 2295 fm; wind, 330°, force 3; weather, overcast; sea, moderate; wire angle, 10°, 10°. | | | | | | | | |
| 0 | 19.10 | 5.33 | | | 0 | 19.10 | 5.33 | | |
| 10 | 19.08 | 5.33 | | | 10 | 19.08 | 5.33 | | |
| 24 | 19.04 | 5.37 | | | 20 | 19.06 | 5.35 | | |
| 48 | 18.36 | 5.49 | | | 30 | 19.00 | 5.38 | | |
| 72 | 17.66 | 5.55 | | | 50 | 18.21 | 5.52 | | |
| 95 | 17.58 | 5.56 | | | 75 | 17.63 | 5.55 | | |
| 146 | 14.98 | 5.11 | | | 100 | 17.57 | 5.54 | | |
| 192 | 11.54 | 3.90 | | | 150 | 14.50 | 5.03 | | |
| | | | | | 200 | 11.20 | 3.78 | | |
| 243 | 9.66 | 3.27 | | | 250 | 9.48 | 3.17 | | |
| 287 | 8.71 | 2.53 | | | 300 | 8.48 | 2.30 | | |
| 384 | 7.42 | 1.16 | | | 400 | 7.30 | 1.03 | | |
| 477 | 6.92 | - | | | 500 | 6.73 | 0.57 | | |
| 575 | 6.11 | 0.43 | | | 600 | 5.95 | 0.40 | | |
| 768 | 5.14 | 0.32 | | | 700 | 5.41 | 0.33 | | |
| 957 | 4.41 | 0.56 | | | 800 | 5.00 | 0.34 | | |
| 1157 | 3.74 | 0.68 | | | 1000 | 4.24 | 0.60 | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 2.80 and 2.87 µg at/L.
c) Alternate value, 2.96 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| HORIZON; May 21, 1952; 1938, 2011, 2132 GCT; 22°37'N, 123°25'W; sounding, 2350 fm; wind, 340°, force 3; weather, cloudy; sea, slight; wire angle, 08°, 12°, 17°. | | | | | | | | | 8 |
| 0 | 19.98 | 5.25 | 0.32 | 0.4 | 0 | 19.98 | 5.25 | 0.32 | 0.4 |
| 10 | 19.86 | 5.28 | 0.34 | 0.4 | 10 | 19.86 | 5.28 | 0.34 | 0.4 |
| 25 | 19.43 | 5.38 | 0.36 | 0.4 | 20 | 19.55 | 5.35 | 0.35 | 0.4 |
| 39 | 19.26 | 5.36 | 0.34 | 0.0 | 30 | 19.36 | 5.37 | 0.35 | 0.2 |
| 58 | 19.01 | 5.37 | 0.38 | 0.7 | 50 | 19.14 | 5.36 | 0.36 | 0.2 |
| 76 | 18.02 | 5.45 | 0.41 | 0.0 | 75 | 18.24 | 5.45 | 0.41 | 0.3 |
| 94 | 17.51 | 5.54 | 0.41 | 0.4 | 100 | 17.42 | 5.53 | 0.42 | 0.8 |
| 142 | 14.58 | 4.97 | 0.68 | 2.9 | 150 | 12.99 | 4.77 | 0.74 | 4.0 |
| 188 | 10.92 | 3.74 | 1.42 | 17.3 | 200 | 10.48 | 3.47 | 1.60 | 22 |
| | | | | | 250 | 9.38 | 2.22 | 2.11 | 34 |
| 234 | 9.59 | 2.60 | 1.97 | 30.4 | 300 | 8.85 | 1.23 | 2.48 | 44 |
| 280 | 9.09 | 1.51 | 2.37 | 40.3 | 400 | 7.61 | 0.50 | | 62 |
| 375 | 7.88 | 0.62 | 2.76 | 59.4 | 500 | 6.72 | 0.29 | | 69 |
| 466 | 6.98 | 0.29 | 2.95 | 66.1 | 600 | 6.12 | 0.22 | | 79 |
| | | | | | 700 | 5.62 | 0.25 | | 86 |
| 490a) | 6.94 | 0.29 | 2.78 | 67.7 | 800 | 5.14 | 0.33 | 2.97 | 93 |
| 590 | 6.38 | 0.22 | 2.84 | 74.0 | 1000 | 4.36 | 0.43 | 3.03 | 109 |
| 690 | 5.66 | 0.25 | 2.95 | 85.5 | 1200 | 3.69 | 0.47 | 2.96 | 148 |
| 740 | 5.44 | 0.26 | 2.96 | 88.4 | 1500 | 2.94 | 1.04 | 2.86 | 139 |
| 789 | 5.21 | 0.32 | 2.96 | 91.8 | 2000 | 2.17 | 1.78 | 2.71 | 153 |
| 839 | 4.92 | 0.34 | 3.00 | 97.6 | | | | | |
| 889 | 4.80 | 0.33 | 3.02 | 99.9 | | | | | |
| 989 | 4.40 | 0.43 | 3.03 | 107.8 | | | | | |
| 1191 | 3.73 | 0.62 | 2.97 | 123.1 | | | | | |
| 1498 | 2.95 | 1.03 | 2.86 | 139.3 | | | | | |
| 2026 | 2.15 | 1.81 | 2.70b) | 153.2 | | | | | |
| HORIZON; May 22, 1952; 0450 GCT; 21°43'N, 123°58'W; sounding, 2210 fm; wind, 020°, force 3; weather, overcast; sea, slight; wire angle, 00°. | | | | | | | | | 9 |
| 0 | 20.94 | 5.14 | | | 0 | 20.94 | 5.14 | | |
| 10 | 20.94 | 5.09 | | | 10 | 20.94 | 5.09 | | |
| 25 | 19.92 | 5.24 | | | 20 | 20.36 | 5.19 | | |
| 50 | 19.44 | 5.32 | | | 30 | 19.77 | 5.26 | | |
| 75 | 18.39 | 5.39 | | | 50 | 19.44 | 5.32 | | |
| 99 | 17.84 | 5.39 | | | 75 | 18.39 | 5.39 | | |
| 151 | 14.60 | 4.80 | | | 100 | 17.83 | 5.38 | | |
| 198 | 11.42 | 3.42 | | | 150 | 15.10 | 4.81 | | |
| 245 | 10.18 | 2.35 | | | 200 | 11.32 | 3.34 | | |
| 292 | 9.24 | 1.84 | | | 250 | 10.09 | 2.29 | | |
| 392 | 7.98 | 0.65 | | | 300 | 9.11 | 1.73 | | |
| 485 | 7.06 | 0.39 | | | 400 | 7.88 | 0.62 | | |
| 584 | 6.44 | 0.33 | | | 500 | 6.94 | 0.38 | | |
| 779 | 5.26 | 0.35 | | | 600 | 6.35 | 0.33 | | |
| 969 | 4.46 | 0.50 | | | 700 | 5.74 | 0.33 | | |
| 1167 | 3.84 | 0.69 | | | 800 | 5.17 | 0.36 | | |
| | | | | | 1000 | 4.35 | 0.54 | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 2.62 µg at/L, not used in interpolation.

SIO/IATTC

SHELLBACK

| | OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 10 | HORIZON; May 22, 1952; 1127, 1253 GCT; 20°52'N, 124°28'W; sounding, 2340 fm; wind, 340°, force 2; weather, overcast; sea, moderate; wire angle, 09°, 13°. | | | | | | | | | |
| | 0 | 21.13 | 5.11 | 0.32 | 0 | 0 | 21.13 | 5.11 | 0.32 | 0 |
| | 10 | 21.14 | 5.12 | 0.34 | 0 | 10 | 21.14 | 5.12 | 0.34 | 0 |
| | 24 | 20.82 | 5.14 | 0.35 | 0 | 20 | 21.00 | 5.13 | 0.35 | 0 |
| | 39 | 20.40 | 5.20 | 0.32 | 0 | 30 | 20.65 | 5.17 | 0.34 | 0 |
| | 58 | 20.02 | 5.30 | 0.35 | 0 | 50 | 20.16 | 5.25 | 0.33 | 0 |
| | 77 | 19.74 | 5.29 | 0.36 | 3.8 | 75 | 19.76 | 5.29 | 0.36 | 3.7 |
| | 95 | 19.13 | 5.41 | 0.37 | 3.8 | 100 | 19.07 | 5.39 | 0.38 | 3.6 |
| | 146 | 15.94 | 4.71 | 0.67 | 2.9 | 150 | 15.40 | 4.60 | 0.73 | 3.5 |
| | 192 | 11.56 | 3.23 | 1.56 | 17.3 | 200 | 11.29 | 2.93 | 1.74 | 20 |
| | 238 | 10.34 | 1.65 | 2.30 | 31.7 | 250 | 10.17 | 1.33 | 2.39 | 35 |
| | 285 | 9.80 | 0.81 | 2.56 | 41.9 | 300 | 9.64 | 0.71 | 2.61 | |
| | 383 | 8.53 | 0.36 | 2.79 | 50.2 | 400 | 8.30 | 0.33 | 2.81 | |
| | 478 | 7.44 | 0.29 | 2.88 | 61.2 | 500 | 7.31 | 0.29 | 2.90 | |
| | 580 | 6.58 | 0.28 | 2.98 | 72.2 | 600 | 6.34 | 0.27 | 3.00 | |
| | | | | | | 700 | 5.64 | 0.26 | 3.12 | |
| | 507a) | 7.26 | 0.27 | 3.14b) | 76.5 | 800 | 5.13 | 0.32 | 3.14 | 99 |
| | 607 | 6.26 | 0.27 | 3.12 | 87.7 | 1000 | 4.30 | 0.47 | 3.08 | 112 |
| | 706 | 5.62 | 0.26 | 3.13 | 92.2 | 1200 | 3.67 | 0.68 | 3.00 | 126 |
| | 757 | 5.32 | 0.29 | 3.12 | 95.6 | 1500 | 2.90 | 1.12 | 2.99 | 143 |
| | 806 | 5.10 | 0.33 | 3.14 | 99.5 | 2000 | 2.23 | 1.73 | 2.80 | 155 |
| | 857 | 4.82 | 0.41 | 3.13 | 99.0 | 2500 | 1.82 | 2.28 | 2.63 | 162 |
| | 907 | 4.61 | 0.46 | 3.09 | 104.4 | | | | | |
| | 1008 | 4.28 | 0.47 | 3.08c) | 112.5 | | | | | |
| | 1211 | 3.62 | 0.69 | 2.96d) | 126.0 | | | | | |
| | 1524 | 2.88 | 1.15 | 2.99 | 144.4 | | | | | |
| | 2053 | 2.15 | - | 2.78 | 155.5 | | | | | |
| | 2603 | 1.78 | 2.39 | 2.60 | 163.1 | | | | | |
| 11 | HORIZON; May 22, 1952; 1946 GCT; 20°00'N, 124°56'W; sounding, 2400 fm; wind, 040°, force 3; weather, overcast; sea, moderate; wire angle, 09°. | | | | | | | | | |
| | 0 | 22.06 | 4.95 | | | 0 | 22.06 | 4.95 | | |
| | 10 | 22.02 | 4.98 | | | 10 | 22.02 | 4.98 | | |
| | 24 | 21.98 | 5.01 | | | 20 | 22.01 | 5.00 | | |
| | 47 | 21.04 | 5.13 | | | 30 | 21.60 | 5.04 | | |
| | 71 | 20.56 | 5.18 | | | 50 | 20.96 | 5.15 | | |
| | 94 | 19.54 | 5.06 | | | 75 | 20.35 | 5.16 | | |
| | 146 | 18.36 | 4.94 | | | 100 | 19.42 | 5.04 | | |
| | 192 | 12.16 | 3.85 | | | 150 | 18.19 | 4.84 | | |
| | 238 | 10.10 | 3.02 | | | 200 | 11.50 | 3.72 | | |
| | 285 | 9.50 | 1.46 | | | 250 | 9.93 | 2.35 | | |
| | 382 | 8.25 | 0.66 | | | 300 | 9.28 | 1.24 | | |
| | 476 | 7.44 | 0.30 | | | 400 | 8.11 | 0.54 | | |
| | 573 | 6.42 | 0.29 | | | 500 | 7.17 | 0.30 | | |
| | 764 | 5.20 | 0.38 | | | 600 | 6.23 | 0.29 | | |
| | 952 | 4.40 | 0.59 | | | 700 | 5.54 | 0.32 | | |
| | 1153 | 3.76 | 0.79 | | | 800 | 5.02 | 0.41 | | |
| | | | | | | 1000 | 4.23 | 0.64 | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 3.10 and 3.17 µg at/L.
c) Alternate value, 2.91 µg at/L, not used in interpolation.
d) Mean value of 2.92 and 2.99 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; May 23, 1952; 0253, 0416 GCT; 19°05'N, 124°38'W; sounding, 2320 fm; wind, 030°, force 3; weather, overcast; sea, moderate; wire angle, 12°, 22°. 12

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.82 | 5.04 | 0.26 | 0 | 0 | 21.82 | 5.04 | 0.26 | 0 |
| 9 | 21.81 | 5.04 | 0.25 | 0 | 10 | 21.80 | 5.04 | 0.25 | 0 |
| 24 | 21.68 | 5.06 | 0.27 | 0 | 20 | 21.73 | 5.05 | 0.27 | 0 |
| 38 | 21.57 | 5.11 | 0.28 | 0 | 30 | 21.63 | 5.08 | 0.28 | 0 |
| 57 | 20.79 | 5.08 | 0.31 | 0 | 50 | 21.29 | 5.08 | 0.31 | 0 |
| 76 | 20.29 | 5.12 | 0.32 | 1.3 | 75 | 20.30 | 5.12 | 0.32 | 1.3 |
| 94 | 20.18 | 5.21 | 0.33 | 0 | 100 | 20.10 | 5.21 | 0.34 | 0 |
| 146 | 19.46 | 5.16 | 0.34 | 0.2 | 150 | 19.25 | 5.13 | 0.35 | 0.3 |
| 192 | 16.42 | 4.62 | 0.56 | 2.3 | 200 | 15.56 | 4.39 | 0.82 | 3.5 |
| 238 | 11.77 | 3.10 | 1.56 | 21.6 | 250 | 10.73 | 2.93 | 1.70 | 26 |
| 284 | 9.50 | 2.55 | 2.03 | 35.1 | 300 | 9.30 | 2.26 | 2.18 | 38 |
| 378 | 8.60 | 0.61 | 2.71a) | 48.6 | 400 | 8.29 | 0.49 | 2.76 | 52 |
| 470 | 7.41 | 0.36 | 2.89 | 62.8 | 500 | 7.03 | 0.32 | 2.93 | 68 |
| 569 | 6.39 | 0.27 | 3.00b) | 77.2 | 600 | 6.14 | 0.26 | 3.00 | 78 |
| | | | | | 700 | 5.58 | 0.31 | 3.00 | 86 |
| 477c) | 7.38 | 0.57 | 2.72 | 58.5 | 800 | 5.16 | 0.41 | 3.00 | 90 |
| 576 | 6.44 | 0.26 | 2.85 | 74.3 | 1000 | 4.33 | 0.53 | 3.03 | 108 |
| 676 | 5.77 | 0.31 | 2.94 | 83.3 | 1200 | 3.73 | 0.68 | 2.99 | 123 |
| 726 | 5.44 | 0.31 | 3.00 | 88.2 | 1500 | 2.97 | 1.04 | 2.93 | 140 |
| 776 | 5.25 | 0.35 | 3.00 | 91.6 | 2000 | 2.23 | 1.74 | 2.71 | 152 |
| 825 | 5.00 | 0.46 | 3.00 | 93.4 | 2500 | 1.82 | 2.22 | 2.60 | 158 |
| 875 | 4.78 | 0.43 | 3.03 | 103.5 | | | | | |
| 976 | 4.44 | 0.50 | 3.03 | 106.0 | | | | | |
| 1176 | 3.77 | 0.65 | 2.99d) | 121.7 | | | | | |
| 1484 | 3.00 | 1.02 | 2.94 | 139.0 | | | | | |
| 2014 | 2.20 | 1.74 | 2.70 | 152.6 | | | | | |
| 2560 | 1.80 | 2.25 | 2.59 | 159.1 | | | | | |

HORIZON; May 23, 1952; 1200 GCT; 18°06'N, 124°14'W; sounding, 2185 fm; wind, 060°, force 4; weather, overcast; sea, rough; wire angle, 09°. 13

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.96 | 4.91 | | | 0 | 21.96 | 4.91 | | |
| 10 | 21.96 | 4.98 | | | 10 | 21.96 | 4.98 | | |
| 25 | 21.98 | 4.99 | | | 20 | 21.97 | 4.98 | | |
| 48 | 20.75 | 5.14 | | | 30 | 21.70 | 5.00 | | |
| 72 | 20.46 | 5.11 | | | 50 | 20.67 | 5.14 | | |
| 96 | 19.80 | 4.95 | | | 75 | 20.35 | 5.08 | | |
| 147 | 17.90 | 4.66 | | | 100 | 19.64 | 4.93 | | |
| 192 | 12.70 | 3.25 | | | 150 | 17.24 | 4.62 | | |
| 223 | 11.96 | 3.28 | | | 200 | 12.50 | 3.25 | | |
| 291 | 10.52 | 3.24 | | | 250 | 11.37 | 3.27 | | |
| 364 | 9.14 | 1.05 | | | 300 | 10.36 | 3.12 | | |
| 505 | 7.10 | 0.44 | | | 400 | 8.53 | 0.77 | | |
| 656 | 5.74 | 0.30 | | | 500 | 7.16 | 0.46 | | |
| 842 | 4.92 | 0.43 | | | 600 | 6.17 | 0.33 | | |
| | | | | | 700 | 5.51 | 0.33 | | |
| | | | | | 800 | 5.07 | 0.42 | | |

a) Alternate value, 2.02 µg at/L, not used in interpolation.
b) Alternate value, 3.07 µg at/L, not used in interpolation.
c) Overlapping casts; reconciliation of property curves when necessary.
d) Alternate value, 2.89 µg at/L, not used in interpolation.

14 HORIZON; May 24, 1952; 0653, 0823, 0940 GCT; 17°07'N, 124°00'W; sounding, 2380 fm; wind, 050°, force 4; weather, overcast; sea, moderate; wire angle, 10°, 21°, 25°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 25.69 | 4.58 | 0.27 | 0 | 0 | 25.69 | 4.58 | 0.27 | 0 |
| 10 | 25.65 | 4.66 | 0.28 | 0 | 10 | 25.65 | 4.66 | 0.28 | 0 |
| 24 | 25.74 | 4.66 | 0.30 | 0 | 20 | 25.73 | 4.66 | 0.30 | 0 |
| 38 | 25.02 | 4.82 | 0.29 | 0 | 30 | 25.63 | 4.71 | 0.29 | 0 |
| 56 | 23.52 | 4.90 | 0.32 | 1.1 | 50 | 24.05 | 4.87 | 0.31 | 0.9 |
| 75 | 21.32 | 5.01 | 0.36 | 0.2 | 75 | 21.32 | 5.01 | 0.36 | 0.2 |
| 94 | 19.22 | 4.32 | 0.74 | 2.5 | 100 | 17.90 | 3.67 | 1.68 | 4.0 |
| 145 | 13.40 | 0.52 | 2.43 | 25.4 | 150 | 13.15 | 0.48 | 2.46 | 27 |
| 192 | 11.92 | - | 2.58 | 34.6 | 200 | 11.82 | 0.26 | 2.61 | 35 |
| 239 | 11.32 | 0.19 | 2.68 | 38.2 | 250 | 11.16 | 0.15 | 2.68 | 41 |
| 287 | 10.69 | 0.12 | 2.69 | 49.1 | 300 | 10.47 | 0.12 | 2.70 | 50 |
| 385 | 9.25 | 0.11 | 2.77 | 54.4 | 400 | 9.02 | 0.11 | 2.80 | 55 |
| 478 | 7.91 | 0.21 | 2.81a) | 57.2 | 500 | 7.63 | 0.17 | 2.93 | 57 |
| 578 | 6.94 | 0.27 | 2.93 | 74.7 | 600 | 6.74 | 0.18 | 2.95 | 69 |
| | | | | | 700 | 6.04 | 0.18 | 3.01 | 79 |
| 495b) | 7.88 | 0.14 | - | 56.9 | 800 | 5.43 | 0.26 | 3.16 | 88 |
| 592 | 6.80 | 0.16 | - | 68.2 | 1000 | 4.55 | 0.35 | 3.17 | 103 |
| 688 | 6.12 | 0.18 | 3.01 | 77.8 | 1200 | 3.84 | 0.74 | 3.07 | 122 |
| 737 | 5.84 | 0.20 | 3.05 | 81.0 | 1500 | 3.05 | 1.10 | 3.02 | 135 |
| 787 | 5.49 | 0.26 | 3.14 | 86.9 | 2000 | 2.19 | 1.84 | 2.69 | 151 |
| 837 | 5.20 | 0.26 | 3.20 | 92.7 | 2500 | 1.84 | 2.28 | 2.58 | 157 |
| 886 | 4.96 | 0.26 | 3.24 | 95.9 | | | | | |
| 986 | 4.60 | 0.33 | 3.19c) | 102.8 | | | | | |
| 1187 | 3.88 | 0.73 | 3.07 | 111.2 | | | | | |
| 1499 | 3.06 | 1.09 | 3.02 | 135.2 | | | | | |
| 2022 | 2.16 | 1.86 | 2.68 | 151.4 | | | | | |
| 2575 | 1.81 | 2.36 | 2.58 | 157.3 | | | | | |

15 HORIZON; May 24, 1952; 1643, 1710 GCT; 16°14'N, 123°34'W; sounding, 2315 fm; wind, 070°, force 5; weather, cloudy; sea, moderate; wire angle, 30°, 45°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 24.58 | 4.67 | 0 | 24.58 | 4.67 |
| 8 | 24.58 | 4.76 | 10 | 24.59 | 4.75 |
| 17 | 24.60 | 4.73 | 20 | 24.58 | 4.74 |
| 42 | 24.04 | 4.87 | 30 | 24.36 | 4.77 |
| 63 | 23.86 | 4.87 | 50 | 23.95 | 4.87 |
| 82 | 23.55 | 4.80 | 75 | 23.67 | 4.83 |
| 122 | 16.68 | 2.28 | 100 | 22.20 | 4.06 |
| 155 | 13.05 | 0.15 | 150 | 13.52 | 0.23 |
| | | | 200 | 11.58 | 0.19 |
| 168 | 12.12 | 0.51 | 250 | 10.87 | 0.18 |
| 196 | 11.68 | 0.19 | 300 | 10.13 | 0.16 |
| 264 | 10.68 | 0.18 | 400 | 8.87 | 0.16 |
| 325 | 9.77 | 0.13 | 500 | 7.73 | 0.18 |
| 394 | 8.95 | 0.16 | 600 | 6.76 | 0.23 |
| 530 | 7.42 | 0.19 | 700 | 6.01 | 0.29 |
| 677 | 6.18 | 0.28 | 800 | 5.47 | 0.33 |
| 855 | 5.24 | 0.33 | | | |

a) Alternate value, 2.92 µg at/L, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Alternate value, 3.29 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| HORIZON; May 24-25, 1952; 2348, 0109 GCT; 15°22.5'N, 123°15'W; sounding, 2200 fm; wind, 050°, force 3; weather, partly cloudy; sea, rough; wire angle, 07°, 12°. | | | | | | | | | 16 |
| 0 | 25.85 | 4.65 | 0.30 | 0 | 0 | 25.85 | 4.65 | 0.30 | 0 |
| 10 | 25.84 | 4.68 | 0.28 | 0 | 10 | 25.84 | 4.68 | 0.28 | 0 |
| 24 | 25.84 | 4.70 | 0.26 | 0 | 20 | 25.84 | 4.69 | 0.29 | 0 |
| 39 | 24.64 | 4.82 | 0.25 | 0 | 30 | 25.84 | 4.76 | 0.29 | 0 |
| 58 | 23.57 | 4.63 | 0.36 | 0 | 50 | 23.85 | 4.70 | 0.31 | 0 |
| 78 | 21.56 | 4.62 | 0.48 | 0 | 75 | 21.80 | 4.62 | 0.46 | 0 |
| 97 | 15.74 | 2.96 | 1.33 | 8.3 | 100 | 15.41 | 2.65 | 1.68 | 9.5 |
| 151 | 12.26 | 0.47 | 2.49 | 27.7 | 150 | 12.27 | 0.47 | 2.48 | 28 |
| 198 | 11.51 | 0.19 | 2.59 | 27.5 | 200 | 11.45 | 0.20 | 2.59 | 28 |
| 243 | 10.68 | 0.20 | 2.64 | 35.1 | 250 | 10.61 | 0.18 | 2.65 | 35 |
| 288 | 10.11 | 0.12 | 2.70 | 38.3 | 300 | 9.96 | 0.13 | 2.70 | 39 |
| 388 | 9.04 | 0.19 | 2.69 | 44.1 | 400 | 8.94 | 0.22 | 2.69 | 45 |
| 483 | 7.99 | 0.32 | 2.74 | 51.1 | 500 | 7.79 | 0.27 | 2.76 | 56 |
| 586 | 7.08 | 0.19 | 2.89 | 63.9 | 600 | 6.96 | 0.21 | 2.90 | 66 |
| | | | | | 700 | 6.11 | 0.40 | 3.01 | 86 |
| 504a) | 7.59 | 0.26 | 2.87b) | 56.5 | 800 | 5.43 | 0.35 | 3.08 | 99 |
| 607 | 6.70 | 0.23 | 2.95c) | 82.8 | 1000 | 4.54 | 0.48 | 3.12 | |
| 712 | 6.00 | 0.40 | 3.02 | 88.0 | 1200 | 3.80 | 0.81 | 3.05 | |
| 815 | 5.36 | 0.35 | 3.09 | 99.5 | 1500 | 3.02 | 1.18 | 2.97 | |
| 862 | 5.10 | 0.44 | 3.12d) | 104.8 | 2000 | 2.21 | 1.83 | 2.77 | |
| 919 | 4.88 | 0.47 | 3.15 | 107.5 | 2500 | 1.83 | 2.33 | 2.64 | |
| 970 | 4.72 | 0.47 | 3.12 | 121.7 | | | | | |
| 1022 | 4.46 | 0.51 | 3.11 | 117.9 | | | | | |
| 1228 | 3.70 | 0.85 | 3.04 | 133.7 | | | | | |
| 1540 | 2.93 | 1.23 | 2.95 | 151.4 | | | | | |
| 2073 | 2.13 | 1.92 | 2.74 | 180.5 | | | | | |
| 2630 | 1.76 | 2.38 | 2.60 | 176.6 | | | | | |
| HORIZON; May 25, 1952; 1115, 1144 GCT; 14°26'N, 122°49'W; sounding, 2430 fm; wind, 050°, force 4; weather, clear; sea, very rough; wire angle, 24°, 33°. | | | | | | | | | 17 |
| 0 | 25.82 | 4.64 | | | 0 | 25.82 | 4.64 | | |
| 9 | 25.82 | 4.62 | | | 10 | 25.83 | 4.62 | | |
| 22 | 25.86 | 4.61 | | | 20 | 25.85 | 4.61 | | |
| 48 | 25.59 | 4.66 | | | 30 | 25.81 | 4.62 | | |
| 70 | 23.86 | 4.95 | | | 50 | 25.50 | 4.67 | | |
| 96 | 16.36 | 2.47 | | | 75 | 19.62 | 4.93 | | |
| 141 | 13.12 | 0.11 | | | 100 | 15.94 | 1.95 | | |
| 184 | 11.88 | 0.15 | | | 150 | 12.80 | 0.11 | | |
| | | | | | 200 | 11.70 | 0.12 | | |
| 223 | 11.45 | 0.08 | | | 250 | 11.02 | 0.09 | | |
| 259 | 10.85 | 0.10 | | | 300 | 10.33 | 0.16 | | |
| 351 | 9.78 | 0.22 | | | 400 | 9.17 | 0.18 | | |
| 439 | 8.72 | 0.14 | | | 500 | 7.99 | 0.17 | | |
| 527 | 7.68 | 0.19 | | | 600 | 6.94 | 0.29 | | |
| 704 | 6.04 | 0.34 | | | 700 | 6.09 | 0.34 | | |
| 890 | 4.96 | 0.35 | | | 800 | 5.43 | 0.35 | | |
| 1084 | 4.24 | 0.64 | | | 1000 | 4.53 | 0.50 | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 2.58 µg at/L, not used in interpolation.
c) Mean value of 2.91 and 2.99 µg at/L.
d) Alternate value, 3.04 µg at/L, not used in interpolation.

SIO/IATTC

SHELLBACK

17.5

HORIZON; May 25, 1952; 1830, 2040 GCT; 13°54'N, 122°54'W; sounding, 2440 fm; wind, missing; weather, missing; sea, missing; wire angle, 20°, 20°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 25.94 | | | | 0 | 25.94 | | | |
| 23 | 25.67 | | | | 10 | 25.81 | | | |
| 47 | 25.48 | | | | 20 | 25.69 | | | |
| 69 | 25.10 | | | | 30 | 25.62 | | | |
| 92 | 22.40 | | | | 50 | 25.43 | | | |
| 140 | 12.67 | | | | 75 | 24.98 | | | |
| 183 | 11.74 | | | | 100 | 17.10 | | | |
| 271 | 10.52 | | | | 150 | 12.42 | | | |
| 364 | 9.32 | | | | 200 | 11.51 | | | |
| 453 | 8.36 | | | | 250 | 10.82 | | | |
| 550 | 7.35 | | | | 300 | 10.09 | | | |
| 737 | 5.88 | | | | 400 | 8.98 | | | |
| 921 | 4.83 | | | | 500 | 7.86 | | | |
| 1408 | 3.26 | | | | 600 | 7.00 | | | |
| | | | | | 700 | 6.17 | | | |
| 134a) | 12.57b) | | | | 800 | 5.48 | | | |
| 193 | 11.38 | | | | 1000 | 4.51 | | | |
| 292 | 10.20 | | | | 1200 | 3.82 | | | |
| 392 | 9.06 | | | | 1500 | 3.08 | | | |
| 491 | 7.94 | | | | 2000 | 2.22 | | | |
| 590 | 7.04 | | | | 2500 | 1.82 | | | |
| 789 | 5.52 | | | | | | | | |
| 991 | 4.57 | | | | | | | | |
| 1504 | 3.08 | | | | | | | | |
| 2032 | 2.17 | | | | | | | | |
| 2579 | 1.78 | | | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 12.45°C, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; May 26, 1952; 0146, 0346, 0509 GCT; 13°24'N, 122°30'W; sounding, 2510 fm; wind, 020°, force 5; weather, overcast; sea, rough; wire angle, 25°, 26°, 17°. 18

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.70 | 4.61 | 0.33 | 0 | 0 | 26.70 | 4.61 | 0.33 | 0 |
| 8 | 26.70 | 4.60 | 0.32 | 0 | 10 | 26.70 | 4.60 | 0.33 | 0 |
| 22 | 26.72 | 4.61 | 0.31 | 0 | 20 | 26.72 | 4.61 | 0.31 | 0 |
| 40 | 26.71 | 4.60 | 0.33 | 0 | 30 | 26.72 | 4.60 | 0.32 | 0 |
| 57 | 26.20 | 4.61 | 0.33 | 0 | 50 | 26.50 | 4.61 | 0.33 | 0 |
| 75 | 25.36 | 4.59 | 0.37 | 0 | 75 | 25.36 | 4.59 | 0.37 | 0 |
| 96 | 15.78 | 1.68 | 1.86 | 0.2 | 100 | 15.24 | 0.70 | 1.96 | 1.2 |
| 142 | 12.54 | 0.08 | 2.53 | 13.5 | 150 | 12.38 | 0.08 | 2.48 | 18 |
| 187 | 11.64 | 0.11 | 2.46 | 29.5 | 200 | 11.50 | 0.13 | 2.53 | 30 |
| 238 | 11.12 | 0.15 | 2.52 | 30.2 | 250 | 11.02 | 0.16 | 2.51 | 30 |
| 279 | 10.78 | 0.17 | 2.50 | 31.7 | 300 | 10.56 | 0.16 | 2.53 | 33 |
| 375 | 9.81 | 0.13 | 2.71 | 38.9 | 400 | 9.48 | 0.14 | 2.74 | 41 |
| 468 | 8.76 | 0.25 | 2.79a) | 47.3 | 500 | 8.36 | 0.21 | 2.82 | 51 |
| 561 | 7.80 | 0.23 | 2.88b) | 54.5 | 600 | 7.28 | 0.23 | 2.93 | 62 |
| 932 | 4.80 | - | - | - | 700 | 6.36 | 0.25 | 3.04 | 73 |
| 1436 | 3.22 | - | - | - | 800 | 5.61 | 0.29 | 3.09 | 84 |
| | | | | | 1000 | 4.54 | 0.44 | 3.14 | 100 |
| 454c) | 8.77 | 0.13 | 2.75d) | 46.6 | 1200 | 3.87 | 0.79 | 3.12 | 115 |
| 552 | 7.75 | 0.17 | 2.90e) | 58.1 | 1500 | 3.05 | 1.13 | 3.04 | 133 |
| 648 | 6.80 | 0.23 | 2.99 | 67.3 | 2000 | 2.21 | 1.84 | | 150 |
| 746 | 5.98 | 0.27 | 3.06 | 77.8 | 2500 | 1.78 | 2.37 | | 156 |
| 844 | 5.32 | 0.30 | 3.11 | 88.6 | | | | | |
| 893 | 5.04 | 0.27 | 3.14 | 94.0 | | | | | |
| 942 | 4.84 | 0.42 | 3.18 | 95.9 | | | | | |
| 991 | 4.58 | 0.43 | 3.14 | 99.0 | | | | | |
| 1139 | 4.04 | 0.69 | 3.12 | 110.9 | | | | | |
| 1442 | 3.18 | 1.06 | 3.06 | 129.4 | | | | | |
| 1959 | 2.24 | 1.78 | - | 149.2 | | | | | |
| 2505 | 1.77 | 2.37 | - | 156.1 | | | | | |

HORIZON; May 26, 1952; 1305, 1359 GCT; 12°18'N, 122°26'W; sounding, 2410 fm; wind, 060°, force 4; weather, cloudy; sea, rough; wire angle, 50°, 20°. 19

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 27.24 | 4.50 | 0 | 27.24 | 4.50 | |
| 9 | 27.24 | 4.51 | 10 | 27.24 | 4.51 | |
| 23 | 27.22 | 4.49 | 20 | 27.23 | 4.50 | |
| 51 | 26.77 | 4.60 | 30 | 27.19 | 4.52 | |
| 75 | 23.46 | 3.38 | 50 | 26.84 | 4.60 | |
| 103 | 14.34 | 0.12 | 75 | 23.46 | 3.38 | |
| | | | 100 | 14.80 | 0.15 | |
| 98c) | 15.44 | 0.39 | 150 | 12.43 | 0.14 | |
| 109 | 14.06 | 0.12 | 200 | 11.54 | 0.10 | |
| 166 | 12.06 | 0.14 | 250 | 11.01 | 0.08 | |
| 197 | 11.60 | 0.10 | 300 | 10.46 | 0.09 | |
| 271 | 10.80 | 0.08 | 400 | 9.22 | 0.09 | |
| 337 | 10.04 | 0.11 | 500 | 8.06 | 0.10 | |
| 404 | 9.17 | 0.08 | 600 | 7.15 | 0.12 | |
| 541 | 7.62 | 0.12 | 700 | 6.37 | 0.11 | |
| 696 | 6.40 | 0.11 | 800 | 5.67 | 0.13 | |
| 868 | 5.21 | 0.17 | | | | |

a) Alternate value, 2.86 µg at/L, not used in interpolation.
b) Mean value of 2.84 and 2.91 µg at/L.
c) Overlapping casts; reconciliation of property curves when necessary.
d) Alternate value, 2.68 µg at/L, not used in interpolation.
e) Mean value of 2.87 and 2.94 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

20 HORIZON; May 26, 1952; 2052, 2238 GCT; 11°52'N, 121°55'W; sounding, 2430 fm; wind, 030°, force 6; weather, rain; sea, very high; wire angle, 40°, 25°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.01 | 4.50 | 0.28 | 0.5 | 0 | 28.01 | 4.50 | 0.28 | 0.5 |
| 8 | 28.02 | 4.50 | 0.31 | 0 | 10 | 28.03 | 4.50 | 0.32 | 0 |
| 22 | 28.06 | 4.52 | 0.33 | 0 | 20 | 28.05 | 4.52 | 0.33 | 0 |
| 32 | 28.03 | 4.52 | 0.28 | 0 | 30 | 28.04 | 4.52 | 0.29 | 0 |
| 50 | 28.01 | 4.49 | 0.28 | 0 | 50 | 28.01 | 4.49 | 0.29 | 0 |
| 66 | 23.53 | 3.89 | 0.57 | 2.7 | 75 | 20.45 | 2.05 | 1.08 | 10 |
| 84 | 16.96 | 0.53 | 2.14 | 16.2 | 100 | 14.50 | 0.31 | 2.37 | 22 |
| 126 | 12.86 | 0.14 | 2.49 | 25.4 | 150 | 12.17 | 0.14 | 2.50 | 27 |
| 168 | 11.88 | 0.17 | 2.48 | 28.1 | 200 | 11.47 | 0.32 | 2.45 | 29 |
| 210 | 11.36 | 0.33 | 2.44 | 28.6 | 250 | 10.91 | 0.31 | 2.46 | 31 |
| 252 | 10.87 | 0.30 | 2.47 | 31.3 | 300 | 10.45 | 0.22 | 2.60 | 34 |
| 334 | 10.14 | 0.15 | 2.66 | 35.8 | 400 | 9.37 | 0.10 | 2.62 | 42 |
| 421 | 9.12 | 0.11 | 2.62 | 43.6 | 500 | 8.23 | 0.15 | 2.78 | 51 |
| 520 | 8.00 | 0.17 | 2.85 | 54.4 | 600 | 7.09 | 0.14 | 2.88 | 65 |
| | | | | | 700 | 6.26 | 0.22 | 2.96 | 74 |
| 600 | 7.09 | 0.14 | 2.88 | 64.8 | 800 | 5.64 | 0.30 | 2.96 | 81 |
| 702 | 6.26 | 0.22 | 2.96 | 74.0 | 1000 | 4.72 | 0.44 | 2.94 | 93 |
| 804 | 5.62 | 0.30 | 2.81 | 81.4 | 1200 | 3.94 | 0.83 | 2.83 | 109 |
| 857 | 5.31 | 0.26 | 2.97a) | 87.5 | 1500 | 3.25 | 1.40 | 2.70 | 130 |
| 906 | 5.09 | 0.28 | 2.88 | 90.5 | 2000 | 2.39 | 1.89 | 2.48 | 147 |
| 954 | 4.90 | 0.43 | 2.94b) | 93.4 | 2500 | 1.78 | 2.16 | 2.39 | 156 |
| 1008 | 4.68 | 0.44 | 2.93 | 93.2 | | | | | |
| 1212 | 3.91 | 0.87 | 2.83c) | 111.2 | | | | | |
| 1535 | 3.19 | - | - | - | | | | | |
| 2121 | 2.14 | 1.96 | 2.52 | 150.3 | | | | | |
| 2712 | 1.78 | 2.30 | 2.35 | 156.6 | | | | | |

22 HORIZON; May 27, 1952; 1955, 2235 GCT; 9°54'N, 121°02'W; sounding, 2410 fm; wind, 140°, force 4; weather, rain; sea, very high; wire angle, 00°, 47°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.96 | 4.50 | 0.25 | 0 | 0 | 27.96 | 4.50 | 0.25 | 0 |
| 10 | 28.10 | 4.50 | 0.24 | 0 | 10 | 28.10 | 4.50 | 0.24 | 0 |
| 24 | 28.18d) | 4.49 | 0.27 | 0 | 20 | 28.15 | 4.49 | 0.26 | 0 |
| 43 | 28.17 | 4.49 | 0.25 | 2.5 | 30 | 28.18 | 4.49 | 0.26 | 1.0 |
| 63 | 26.52 | 3.64 | 0.60 | 0.5 | 50 | 28.13 | 4.44 | 0.26 | 2.1 |
| 82 | 21.96 | 1.86 | 1.43 | 6.5 | 75 | 23.90 | 2.40 | 1.16 | 2.8 |
| 105 | 17.11 | 2.08 | 1.39 | 11.2 | 100 | 18.28 | 1.92 | 1.85 | 10.5 |
| 158 | 12.28 | 0.49 | 2.21 | 26.3 | 150 | 12.48 | 0.55 | 2.19 | 25 |
| 210 | 11.42 | 0.50 | 2.25 | 28.1 | 200 | 11.54 | 0.50 | 2.24 | 28 |
| 265 | 10.76 | 0.59 | 2.26 | 34.2 | 250 | 10.92 | 0.58 | 2.26 | 30 |
| | | | | | 300 | 10.56 | 0.55 | 2.33 | 32 |
| 407 | 10.07 | 0.35 | 2.52 | 35.1 | 400 | 10.11 | 0.28 | 2.52 | 35 |
| 452 | 9.56 | - | - | - | 500 | 8.79 | 0.20 | 2.70 | 48 |
| 496 | 8.86 | 0.11 | 2.78 | 47.3 | 600 | 7.47 | 0.11 | 2.93 | 58 |
| 547 | 8.11 | 0.11 | 2.94 | 54.2 | 700 | 6.53 | 0.17 | 3.07 | 71 |
| 573 | 7.76 | 0.10 | 2.92 | 56.9 | 800 | 5.85 | 0.18 | 3.11 | 80 |
| 600 | 7.47 | 0.11 | 2.93 | 58.5 | 1000 | 4.88 | 0.42 | 3.11 | 92 |
| 627 | 7.24 | 0.11 | 3.00 | 60.7 | 1200 | 4.13 | 0.82 | (2.98) | 105 |
| 656 | 6.94 | 0.15 | 3.03 | 65.5 | | | | | |
| 775 | 5.98 | 0.16 | 3.12e) | 78.3 | | | | | |
| 976 | 4.95 | 0.39 | 3.12 | 91.3 | | | | | |
| 1376 | 3.52 | 1.23 | 2.82f) | 117.5 | | | | | |

a) Alternate value, 2.88 µg at/L, not used in interpolation.
b) Mean value of 2.90 and 2.98 µg at/L.
c) Alternate value, 2.74 µg at/L, not used in interpolation.
d) Alternate value, 27.67°C, not used in interpolation.
e) Alternate value, 3.05 µg at/L, not used in interpolation.
f) Alternate value, 2.75 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; May 28, 1952; 0833 GCT; 8°44'N, 120°44'W; sounding, 2310 fm; wind, 180°, force 4; weather, cloudy; sea, very rough; wire angle, 11°. 23

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.27 | 4.42 | | | 0 | 28.27 | 4.42 | | |
| 9 | 28.32 | 4.49 | | | 10 | 28.32 | 4.50 | | |
| 23 | 28.31a) | 4.52 | | | 20 | 28.31 | 4.53 | | |
| 52 | 24.08 | 2.76 | | | 30 | 28.31 | 4.30 | | |
| 76 | 19.80 | 2.68 | | | 50 | 25.15 | 3.30 | | |
| 104 | 14.24 | 0.23 | | | 75 | 20.05 | 2.68 | | |
| 156 | 11.86 | 0.50 | | | 100 | 14.70 | 0.28 | | |
| 207 | 11.08 | 0.57 | | | 150 | 12.00 | 0.46 | | |
| 266 | 10.38 | 0.67 | | | 200 | 11.16 | 0.56 | | |
| 310 | 9.98 | 0.67 | | | 250 | 10.54 | 0.64 | | |
| 419 | 9.28 | 0.41 | | | 300 | 10.05 | 0.66 | | |
| 520 | 8.30 | 0.08 | | | 400 | 9.40 | 0.49 | | |
| 623 | 7.15 | 0.10 | | | 500 | 8.55 | 0.12 | | |
| 824 | 5.62 | 0.32 | | | 600 | 7.36 | 0.10 | | |
| 1026 | 4.64 | 0.73 | | | 700 | 6.53 | 0.16 | | |
| 1220 | 3.96 | 1.03 | | | 800 | 5.81 | 0.29 | | |
| | | | | | 1000 | 4.76 | 0.67 | | |
| | | | | | 1200 | 4.03 | 1.00 | | |

HORIZON; May 28, 1952; 1811, 1905 GCT; 7°41.5'N, 120°27'W; sounding, 2160 fm; wind, 160°, force 5; weather, rain; sea, high; wire angle, 30°, 27°. 24

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.22 | 4.58 | 0.28 | 0 | 0 | 28.22 | 4.58 | 0.28 | 0 |
| 8 | 28.22 | 4.55 | 0.25 | 0 | 10 | 28.23 | 4.55 | 0.25 | 0.3 |
| 25 | 28.25 | 4.54 | 0.26 | 2.2 | 20 | 28.24 | 4.54 | 0.26 | 2.0 |
| 37 | 28.09 | 4.55 | 0.24 | 1.3 | 30 | 28.25 | 4.55 | 0.26 | 2.0 |
| 57 | 26.63 | 4.64 | 0.25 | 0.4 | 50 | 27.18 | 4.62 | 0.24 | 0.8 |
| 76 | 20.22 | 3.32 | 0.81 | 7.6 | 75 | 20.28 | 3.80 | 0.72 | 7.5 |
| 95 | 14.72 | 1.03 | 1.82 | 17.6 | 100 | 14.19 | 0.85 | 1.93 | 20 |
| 141 | 11.98 | 0.32 | 2.21 | 28.1 | 150 | 11.75 | 0.33 | 2.23 | 28 |
| 188 | 11.13 | 0.51 | 2.27 | 29.2 | 200 | 10.95 | 0.64 | 2.26 | 29 |
| 238 | 10.52 | 0.97 | 2.21 | 30.1 | 250 | 10.41 | 0.97 | 2.22 | 30 |
| 286 | 10.13 | 0.93 | 2.30 | 30.2 | 300 | 10.03 | 0.85 | 2.34 | 31 |
| 381 | 9.34 | 0.40 | 2.53 | 38.0 | 400 | 9.16 | 0.33 | 2.56 | 39 |
| 482 | 8.48 | 0.18 | 2.73 | 57.4 | 500 | 8.32 | 0.18 | 2.77 | 49 |
| 582 | 7.26 | 0.19 | 2.87 | 58.5 | 600 | 7.06 | 0.19 | 2.89 | 60 |
| | | | | | 700 | 6.16 | 0.30 | 2.89 | 72 |
| 453b) | 8.86 | 0.33 | 2.64 | 42.7 | 800 | 5.53 | 0.56 | 2.95 | 82 |
| 544 | 7.82 | 0.20 | 2.71 | 53.8 | 1000 | 4.59 | 0.71 | 3.00 | 97 |
| 732 | 5.96 | 0.37 | 2.90 | 74.7 | 1200 | 3.87 | 1.15 | 2.97 | 111 |
| 828 | 5.35 | 0.62 | 2.97 | 85.0 | 1500 | 2.98 | 1.59 | 2.93 | 130 |
| 875 | 5.09 | 0.67 | 2.99 | 88.0 | 2000 | 2.14 | 2.22 | 2.81 | 148 |
| 924 | 4.84 | 0.66 | 2.99 | 91.6 | | | | | |
| 971 | 4.70 | 0.72 | 3.03 | 95.8 | | | | | |
| 1019 | 4.52 | 0.71 | 3.00 | 98.1 | | | | | |
| 1113 | 4.18 | 0.99 | 2.92 | 104.9 | | | | | |
| 1396 | 3.23 | 1.43 | 2.94 | 124.7 | | | | | |
| 1866 | 2.26c) | 2.10 | 2.87 | 143.8 | | | | | |
| 2367 | 1.92 | 2.44 | 2.65 | 156.1 | | | | | |

a) Alternate value, 27.97°C, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Alternate value, 2.38°C, not used in interpolation.

25

HORIZON; May 29, 1952; 0622 GCT; 6°49'N, 119°55'W; sounding, 2240 fm; wind, 180°, force 5; weather, cloudy; sea, high; wire angle, 32°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 27.99 | 4.55 | | | 0 | 27.99 | 4.55 | | |
| 8 | 28.00 | 4.59 | | | 10 | 28.01 | 4.59 | | |
| 20 | 28.02 | 4.59 | | | 20 | 28.02 | 4.59 | | |
| 44 | 27.42 | 4.49 | | | 30 | 28.02 | 4.56 | | |
| 63 | 25.06 | 3.89 | | | 50 | 26.98 | 4.43 | | |
| 86 | 18.66 | 2.83 | | | 75 | 21.90 | 3.35 | | |
| 126 | 13.06 | 0.26 | | | 100 | 15.15 | 1.45 | | |
| 167 | 11.50 | 0.54 | | | 150 | 12.04 | 0.39 | | |
| 213 | 10.62 | 0.88 | | | 200 | 10.81 | 0.87 | | |
| 252 | 10.14 | 1.06 | | | 250 | 10.16 | 1.05 | | |
| 338 | 9.56 | 0.98 | | | 300 | 9.77 | 1.04 | | |
| 421 | 8.92 | 0.47 | | | 400 | 9.10 | 0.59 | | |
| 505 | 8.07 | 0.23 | | | 500 | 8.14 | 0.24 | | |
| 672 | 6.40 | 0.43 | | | 600 | 7.03 | 0.31 | | |
| 849 | 5.36 | 0.76 | | | 700 | 6.21 | 0.48 | | |
| 1037 | 4.44 | 1.20 | | | 800 | 5.62 | 0.67 | | |
| | | | | | 1000 | 4.63 | 1.06 | | |

26

HORIZON; May 29, 1952; 1755, 2000 GCT; 5°52.5'N, 119°20'W; sounding, 2250 fm; wind, 160°, force 4; weather, cloudy; sea, rough; wire angle, 30°, 46°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.20 | 4.52 | 0.30 | 0.2 | 0 | 28.20 | 4.52 | 0.30 | 0.2 |
| 9 | 28.21 | 4.50 | 0.27 | 0.4 | 10 | 28.21 | 4.50 | 0.27 | 0.4 |
| 26 | 28.22 | 4.52 | 0.27 | 0.0 | 20 | 28.22 | 4.51 | 0.27 | 0.0 |
| 38 | 28.20 | 4.52 | 0.32 | 0.0 | 30 | 28.21 | 4.52 | 0.28 | 0.0 |
| 60 | 26.46 | 4.13 | 0.50 | 1.3 | 50 | 28.02 | 4.38 | 0.40 | 0.2 |
| 79 | 23.80 | 3.49 | 0.74 | 4.0 | 75 | 24.25 | 3.64 | 0.70 | 3.5 |
| 100 | 17.64 | 2.75 | 1.14 | 10.6 | 100 | 17.64 | 2.75 | 1.14 | 10.6 |
| 147 | 12.14 | 0.78 | 2.18 | 27.0 | 150 | 12.05 | 0.78 | 2.15 | 27 |
| 195 | 11.05 | 0.76 | 2.29 | 29.3 | 200 | 10.94 | 0.78 | 2.30 | 30 |
| 243 | 10.20 | 1.05 | 2.31 | 31.7 | 250 | 10.13 | 1.10 | 2.31 | 32 |
| 292 | 9.80 | 1.37 | 2.26 | 31.3 | 300 | 9.73 | 1.35 | 2.27 | 31 |
| 380 | 9.15 | 0.87 | 2.48 | 37.4 | 400 | 8.93 | 0.75 | 2.53 | 39 |
| 482 | 8.16 | 0.41 | 2.72 | 47.7 | 500 | 8.00 | 0.37 | 2.75 | 49 |
| 590 | 7.22 | 0.29 | 2.85 | 68.2 | 600 | 7.16 | 0.29 | 2.85 | 56 |
| | | | | | 700 | 6.29 | 0.46 | 2.88 | 65 |
| 585a) | 7.42 | 0.27 | 2.80 | 55.1 | 800 | 5.70 | 0.51 | 2.94 | 75 |
| 665 | 6.62 | 0.49 | 2.87 | 61.9 | 1000 | 4.57 | 0.83 | (2.99) | 94 |
| 704 | 6.24 | 0.46 | 2.88 | 65.9 | 1200 | 3.94 | 0.98 | (2.91) | 112 |
| 746 | 5.98 | 0.62 | 2.92 | 69.7 | 1500 | 3.17 | 1.02 | (2.72) | 128 |
| 784 | 5.80 | 0.50 | 2.93 | 72.7 | 2000 | 2.16 | 1.79 | 2.57 | 154 |
| 827 | 5.52 | 0.55 | 2.98 | 76.9 | | | | | |
| 909 | 5.00 | 0.71 | 3.00b) | 85.1 | | | | | |
| 1172 | 3.99 | 0.98 | 2.93 | 109.8 | | | | | |
| 1672 | 2.69 | 1.91 | 2.64 | 136.1 | | | | | |
| 2220 | 1.99 | 2.36 | 2.56 | 166.3 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 2.91 µg at/L, not used in interpolation.

HORIZON; May 30, 1952; 0915 GCT; 5°02.5'N, 119°21'W; sounding, 2250 fm; wind, 120°, force 2; weather, overcast; sea, moderate; wire angle, 09°. 27

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 28.00 | 4.58 | | | 0 | 28.00 | 4.58 | | |
| 10 | 28.02 | - | | | 10 | 28.02 | 4.59 | | |
| 24 | 28.05 | 4.60 | | | 20 | 28.04 | 4.60 | | |
| 53 | 25.48 | 4.58 | | | 30 | 28.05 | 4.60 | | |
| 76 | 20.82 | 3.02 | | | 50 | 25.90 | 4.59 | | |
| 104 | 15.08 | 1.64 | | | 75 | 20.83 | 3.01 | | |
| 155 | 12.96 | 1.61 | | | 100 | 15.50 | 1.66 | | |
| 205 | 12.23 | 1.00 | | | 150 | 13.10 | 1.62 | | |
| 260 | 11.42 | 0.92 | | | 200 | 12.28 | 1.04 | | |
| 307 | 10.92 | 0.78 | | | 250 | 11.56 | 0.94 | | |
| 415 | 9.57 | 1.20 | | | 300 | 10.98 | 0.78 | | |
| 519 | 8.71 | 0.64 | | | 400 | 9.73 | 1.16 | | |
| 624 | 7.17 | 0.38 | | | 500 | 8.89 | 0.76 | | |
| 828 | 5.50 | 0.74 | | | 600 | 7.46 | 0.40 | | |
| 1030 | 4.42 | 1.18 | | | 700 | 6.43 | 0.50 | | |
| 1224 | 3.73 | 1.56 | | | 800 | 5.67 | 0.69 | | |
| | | | | | 1000 | 4.55 | 1.12 | | |
| | | | | | 1200 | 3.82 | 1.52 | | |

HORIZON; May 30, 1952; 1740, 1909 GCT; 4°06'N, 119°07'W; sounding, 2350 fm; wind, 130°, force 2; weather, partly cloudy; sea, rough; wire angle, 12°, 25°. 28

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.50 | 4.61 | 0.58 | 2.3 | 0 | 26.50 | 4.61 | 0.58 | 2.3 |
| 10 | 26.50 | 4.59 | 0.59 | 5.2 | 10 | 26.50 | 4.59 | 0.59 | 5.2 |
| 24 | 26.50 | 4.63 | 0.67 | 2.0 | 20 | 26.50 | 4.61 | 0.64 | 2.8 |
| 43 | 25.88 | 4.64 | 0.78 | 3.1 | 30 | 26.50 | 4.63 | 0.69 | 2.4 |
| 61 | 20.01 | 3.28 | 1.23 | 7.4 | 50 | 23.80 | 4.53 | 0.84 | 4.7 |
| 79 | 15.89 | 1.80 | 1.76 | 18.9 | 75 | 16.92 | 1.92 | 1.68 | 18.5 |
| 102 | 13.99 | 1.36 | 2.01 | 19.3 | 100 | 14.07 | 1.37 | 1.99 | 19 |
| 153 | 13.03 | 1.07 | 2.07a) | 23.6 | 150 | 13.06 | 1.06 | 2.06 | 24 |
| 203 | 12.60 | 1.25 | 2.11 | 23.4 | 200 | 12.63 | 1.24 | 2.10 | 23 |
| 258 | 12.01 | 0.93 | 2.25 | 25.4 | 250 | 12.08 | 0.98 | 2.23 | 25 |
| 304 | 11.64 | 0.77 | 2.33 | 27.2 | 300 | 11.67 | 0.77 | 2.32 | 27 |
| 410 | 10.16 | 1.00 | 2.37 | 31.7 | 400 | 10.30 | 1.00 | 2.37 | 31 |
| 512 | 8.70 | 0.51 | 2.78 | 44.8 | 500 | 8.86 | 0.52 | 2.51 | 43 |
| 617 | 7.14 | 0.69 | 2.94 | 63.5 | 600 | 7.35 | 0.60 | 2.70 | 51 |
| | | | | | 700 | 6.45 | 1.30 | 2.84 | 59 |
| 473b) | 9.35 | 0.60 | 2.45c) | 38.9 | 800 | 5.56 | 1.34 | 2.89 | 72 |
| 653 | 6.84 | 1.07 | 2.78 | 54.5 | 1000 | 4.53 | 1.38 | 2.91 | 90 |
| 757 | 5.93 | 1.36 | 2.87 | 65.7 | 1200 | 3.87 | 1.58 | 2.90 | 109 |
| 852 | 5.16 | 1.30 | 2.90 | 78.3 | 1500 | 3.01 | 1.70 | 2.81 | 119 |
| 899 | 4.95 | 1.34 | 2.94 | 81.2 | 2000 | 2.35 | 1.73 | 2.72 | 144 |
| 946 | 4.81 | 1.35 | 2.92 | 85.0 | | | | | |
| 994 | 4.57 | 1.36 | 2.97 | 90.5 | | | | | |
| 1041 | 4.37 | 1.41 | 2.90 | 90.7 | | | | | |
| 1136 | 4.05 | 1.52 | 2.90 | 102.2 | | | | | |
| 1428 | 3.18 | 2.65u | 2.90d) | 125.6 | | | | | |
| 1933 | 2.40 | 1.70 | 2.74 | 142.9 | | | | | |
| 2469 | 1.87 | 2.26 | 2.60 | 154.3 | | | | | |

a) Alternate value, 2.15 µg at/L, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Alternate value, 2.54 µg at/L, not used in interpolation.
d) Mean value of 2.87 and 2.94 µg at/L.

29

HORIZON; May 31, 1952; 0304, 0329 GCT; 3°11'N, 118°53.5'W; sounding, 2230 fm; wind, 100°, force 4; weather, cloudy; sea, rough; wire angle, 38°, 52°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 26.00 | 4.58 | | | 0 | 26.00 | 4.58 | | |
| 8 | 26.00 | 4.61 | | | 10 | 26.00 | 4.60 | | |
| 20 | 26.00 | 4.55 | | | 20 | 26.00 | 4.55 | | |
| 41 | 25.03 | 4.47 | | | 30 | 26.00 | 4.47 | | |
| 59 | 18.29 | 2.59 | | | 50 | 21.80 | 3.60 | | |
| 78 | 15.47 | 1.72 | | | 75 | 15.60 | 1.74 | | |
| 119 | 13.70 | 1.67 | | | 100 | 14.20 | 1.68 | | |
| 157 | 13.13 | 1.36 | | | 150 | 13.22 | 1.36 | | |
| | | | | | 200 | 12.66 | 1.07 | | |
| 170 | 12.98 | 1.36 | | | 250 | 12.30 | 0.90 | | |
| 202 | 12.66 | 1.08 | | | 300 | 11.65 | 0.95 | | |
| 270 | 12.10 | 0.86 | | | 400 | 9.75 | 0.59 | | |
| 335 | 11.02 | 1.05 | | | 500 | 8.19 | 0.36 | | |
| 403 | 9.68 | 0.57 | | | 600 | 7.03 | 0.60 | | |
| 543 | 7.64 | 0.33 | | | 700 | 6.18 | 1.05 | | |
| 694 | 6.22 | 1.06 | | | 800 | 5.44 | 1.20 | | |
| 866 | 4.98 | 1.27 | | | | | | | |

30

HORIZON; May 31, 1952; 1109, 1234 GCT; 2°18'N, 118°29'W; sounding, 2130 fm; wind, 130°, force 3; weather, cloudy; sea, rough; wire angle, 27°, 48°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 25.30 | 4.61 | 0.68 | 7.6 | 0 | 25.30 | 4.61 | 0.68 | 7.6 |
| 9 | 25.30 | 4.58 | 0.67 | 6.8 | 10 | 25.30 | 4.58 | 0.67 | 6.8 |
| 25 | 25.32 | 4.60 | 0.67 | 6.8 | 20 | 25.31 | 4.59 | 0.67 | 6.8 |
| 37 | 21.98 | 3.81 | 0.91 | 10.1 | 30 | 25.30 | 4.57 | 0.70 | 8.0 |
| 58 | 17.44 | 2.38 | 1.44a) | 17.8 | 50 | 19.15 | 3.53 | 1.21 | 15.0 |
| 77 | 14.58 | 1.62 | 1.72 | 26.3 | 75 | 14.68 | 1.63 | 1.72 | 26.0 |
| 97 | 13.86 | 1.63 | 1.75 | 26.3 | 100 | 13.80 | 1.64 | 1.75 | 26.3 |
| 143 | 13.38 | 1.74 | 1.77 | 27.0 | 150 | 13.32 | 1.72 | 1.77 | 27 |
| 189 | 12.92 | 1.27 | 1.86b) | 29.3 | 200 | 12.80 | 1.13 | 1.86 | 30 |
| 234 | 12.40 | 1.27 | 1.95 | 32.2 | 250 | 12.23 | 0.82 | 1.99 | 34 |
| 278 | 11.92 | 0.77 | 2.05 | 36.0 | 300 | 11.51 | 0.91 | 2.07 | 37 |
| 367 | 11.69 | 1.33 | 2.16 | 40.5 | 400 | 9.63 | 1.22 | 2.32 | |
| 466 | 8.56 | 0.41 | 2.52 | 58.9 | 500 | 7.99 | 0.44 | 2.59 | |
| 565 | 6.98 | 0.85 | 2.70 | 70.6 | 600 | 6.68 | 1.17 | 2.74 | 55 |
| | | | | | 700 | 6.02 | 1.23 | 2.84 | 63 |
| 421c) | 9.29 | 1.02 | 2.40 | 36.4 | 800 | 5.46 | 1.13 | 2.94 | 73 |
| 581 | 6.90 | 1.05 | 2.72 | 53.8 | 1000 | 4.31 | 1.66 | 2.84 | 92 |
| 661 | 6.24 | 1.35 | 2.69 | 59.0 | 1200 | 3.73 | 1.74 | 2.82 | 107 |
| 699 | 6.02 | 1.23 | 2.84 | 63.0 | 1500 | 3.09 | 1.90 | 2.75 | 125 |
| 741 | 5.82 | 1.13 | 2.86 | 67.3 | 2000 | 2.14 | 2.29 | 2.63 | 145 |
| 779 | 5.58 | 1.12 | 2.94 | 70.7 | | | | | |
| 822 | 5.37 | 1.18 | 2.93 | 74.3 | | | | | |
| 903 | 4.81 | 1.55 | 2.84 | 82.8 | | | | | |
| 1163 | 3.82 | 1.72 | 2.82 | 104.4 | | | | | |
| 1656 | 2.78 | 1.99 | 2.73 | 133.7 | | | | | |
| 2201 | 2.00 | 2.53 | 2.58 | 149.8 | | | | | |

a) Alternate value, 1.11 µg at/L, not used in interpolation.
b) Mean value of 1.83 and 1.90 µg at/L.
c) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| HORIZON; May 31, 1952; 2157 GCT; 1°24'N, 118°02'W; sounding, 2155 fm; wind, 110°, force 3; weather, cloudy; sea, rough; wire angle, 16°. | | | | | | | | | 31 |
| 0 | 24.52 | 4.42 | | | 0 | 24.52 | 4.42 | | |
| 10 | 24.38 | 4.43 | | | 10 | 24.38 | 4.43 | | |
| 29 | 24.11 | 4.31 | | | 20 | 24.27 | 4.39 | | |
| 56 | 16.88 | 2.13 | | | 30 | 24.08 | 4.30 | | |
| 84 | 14.09 | 1.84 | | | 50 | 18.50 | 2.29 | | |
| 110 | 13.26 | 1.45 | | | 75 | 14.62 | 0.94 | | |
| 164 | 12.30 | - | | | 100 | 13.49 | 1.60 | | |
| 217 | 11.74 | 1.13 | | | 150 | 12.52 | 1.26 | | |
| 269 | 11.61 | 0.81 | | | 200 | 11.85 | 1.16 | | |
| 323 | 10.92 | 0.38 | | | 250 | 11.67 | 0.94 | | |
| 423 | 9.40 | 0.48 | | | 300 | 11.27 | 0.50 | | |
| 529 | 7.81 | 0.86 | | | 400 | 9.73 | 0.43 | | |
| 630 | 6.68 | 1.51 | | | 500 | 8.25 | 0.68 | | |
| 866 | 5.33 | 1.85 | | | 600 | 6.92 | 1.36 | | |
| 1047 | 4.40 | 1.82 | | | 700 | 6.26 | 1.70 | | |
| 1250 | 3.60 | 1.92 | | | 800 | 5.70 | 1.83 | | |
| | | | | | 1000 | 4.63 | 1.82 | | |
| | | | | | 1200 | 3.76 | 1.88 | | |
| HORIZON; June 1, 1952; 1456, 1627 GCT; 0°20'S, 117°10'W; sounding, 2300 fm; wind, 030°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°, 25°. | | | | | | | | | 33 |
| 0 | 24.94 | 4.43 | | | 0 | 24.94 | 4.43 | | |
| 9 | 24.93 | 4.45 | | | 10 | 24.92 | 4.44 | | |
| 28 | 24.60 | 4.19 | | | 20 | 24.77 | 4.34 | | |
| 56 | 19.30 | 2.89 | | | 30 | 24.55 | 4.12 | | |
| 84 | 16.42 | 1.82 | | | 50 | 20.30 | 2.96 | | |
| 112 | 14.94 | 2.79 | | | 75 | 17.17 | 2.80 | | |
| 169 | 12.24 | 2.19 | | | 100 | 15.50 | 2.78 | | |
| 226 | 12.09 | 1.83 | | | 150 | 13.00 | 2.36 | | |
| | | | | | 200 | 12.18 | 2.03 | | |
| 276 | 11.82 | 1.24 | | | 250 | 11.94 | 1.50 | | |
| 332 | 11.68 | 0.95 | | | 300 | 11.77 | 1.10 | | |
| 439 | 8.93 | 0.60 | | | 400 | 10.03 | 0.64 | | |
| 551 | 7.29 | 1.16 | | | 500 | 7.85 | 0.85 | | |
| 658 | 6.44 | 1.58 | | | 600 | 6.87 | 1.35 | | |
| 877 | 5.00 | 1.89 | | | 700 | 6.13 | 1.67 | | |
| 1090 | 4.02 | 1.96 | | | 800 | 5.44 | 1.83 | | |
| 1298 | 3.62 | 1.94 | | | 1000 | 4.36 | 1.96 | | |
| | | | | | 1200 | 3.74 | 1.94 | | |

34

HORIZON; June 2, 1952; 0012, 0130 GCT; 1°23'S, 117°05'W; sounding, 2310 fm; wind, 090°, force 4; weather, partly cloudy; sea, rough; wire angle, 17°, 22°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 25.53 | 4.59 | 0.74 | 1.6 | 0 | 25.53 | 4.59 | 0.74 | 1.6 |
| 10 | 25.50 | 4.60 | 0.74 | 3.1 | 10 | 25.50 | 4.60 | 0.74 | 3.1 |
| 24 | 25.26 | 4.56 | 0.76 | 1.4 | 20 | 25.40 | 4.59 | 0.74 | 1.5 |
| 43 | 18.12 | 2.71 | 1.42 | 9.7 | 30 | 21.10 | 4.41 | 0.80 | 2.5 |
| 62 | 15.56 | 1.69 | 1.76 | 14.2 | 50 | 17.35 | 2.13 | 1.66 | 11.5 |
| 81 | 13.92 | 1.82 | 1.78 | 18.0 | 75 | 14.40 | 1.78 | 1.77 | 17 |
| 103 | 12.92 | 1.36 | 1.96 | 20.5 | 100 | 13.01 | 1.40 | 1.92 | 20 |
| 155 | 12.18 | 1.27 | 2.04 | 22.3 | 150 | 12.22 | 1.26 | 2.03 | 22 |
| 206 | 11.86 | 1.15 | 2.11 | 24.3 | 200 | 11.90 | 1.15 | 2.10 | 24 |
| 260 | 11.60 | 0.89 | 2.16 | 29.9 | 250 | 11.65 | 0.96 | 2.14 | 29 |
| 304 | 11.21 | 0.43 | 2.40 | 32.6 | 300 | 11.27 | 0.45 | 2.37 | 33 |
| 407 | 9.58 | 0.49 | 2.55 | 37.8 | 400 | 9.68 | 0.48 | 2.54 | 37 |
| 507 | 7.90 | 1.02 | 2.67 | 48.1 | 500 | 8.01 | 1.96 | 2.66 | 49 |
| 615 | 6.34 | 1.76 | 2.71a) | 53.6 | 600 | 6.54 | 1.73 | 2.71 | 53 |
| | | | | | 700 | 5.79 | 1.92 | 2.66 | 58 |
| 608b) | 6.56 | 1.79 | 2.42 | 48.1 | 800 | 5.48 | 1.94 | 2.57 | 66 |
| 808 | 5.46 | 1.95 | 2.56 | 66.6 | 1000 | 4.37 | 2.07 | 2.63 | 87 |
| 910 | 4.80 | 2.04 | 2.57 | 78.5 | 1200 | 3.67 | 1.96 | 2.70 | 107 |
| 959 | 4.56 | 2.04 | 2.64c) | 83.0 | 1500 | 3.14 | 2.20 | 2.54 | 119 |
| 1015 | 4.32 | 2.10 | 2.64 | 88.0 | 2000 | 2.26 | 2.40 | 2.55 | 141 |
| 1065 | 4.14 | 2.12 | 2.63 | 92.9 | 2500 | 1.88 | 2.85 | 2.47 | 148 |
| 1119 | 4.02 | 1.94 | 2.68 | 98.1 | | | | | |
| 1224 | 3.58 | 1.97 | 2.70 | 110.9 | | | | | |
| 1548 | 3.08 | 2.24 | 2.60 | 119.7 | | | | | |
| 2117 | 2.10 | 2.59 | 2.54 | 146.0 | | | | | |
| 2695 | 1.76 | 3.02 | 2.41 | 149.2 | | | | | |

35

HORIZON; June 2, 1952; 0845, 0930 GCT; 2°19'S, 116°50'W; sounding, 2340 fm; wind, 080°, force 5; weather, partly cloudy; sea, rough; wire angle, 25°, 35°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 25.47 | 4.57 | 0 | 25.47 | 4.57 |
| 9 | 25.48 | 4.59 | 10 | 25.48 | 4.59 |
| 27 | 25.48 | 4.57 | 20 | 25.48 | 4.58 |
| 53 | 16.09 | 2.28 | 30 | 25.48 | 4.54 |
| 78 | 14.07 | 1.84 | 50 | 18.25 | 2.60 |
| 104 | 13.64 | 1.71 | 75 | 14.14 | 1.36 |
| 149 | 12.90 | 1.09 | 100 | 13.71 | 1.75 |
| 200 | 12.34 | 1.36 | 150 | 12.89 | 1.09 |
| 245 | 11.87 | 0.73 | 200 | 12.34 | 1.36 |
| 292 | 11.61 | 0.60 | 250 | 11.85 | 0.70 |
| 384 | 10.12 | 0.50 | 300 | 11.56 | 0.57 |
| 478 | 8.80 | 0.58 | 400 | 9.91 | 0.48 |
| 569 | 7.31 | 1.24 | 500 | 8.40 | 0.72 |
| 767 | 5.60 | 1.83 | 600 | 6.94 | 1.39 |
| | | | 700 | 6.05 | 1.74 |
| 945 | 4.68 | 1.78 | 800 | 5.41 | 1.82 |
| 1145 | 3.90 | 1.94 | 1000 | 4.44 | 1.80 |

a) Alternate value, 2.80 µg at/L.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Mean value of 2.60 and 2.67 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 2, 1952; 1712, 1837 GCT; 3°12'S, 116°28'W; sounding, 2280 fm; wind, 090°, force 5; weather, cloudy; sea, very rough; wire angle, 27°, 46°. 36

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.26 | 4.57 | 0.77 | 1.8 | 0 | 25.26 | 4.57 | 0.77 | 1.8 |
| 9 | 25.26 | 4.58 | 0.79 | 2.2 | 10 | 25.26 | 4.58 | 0.79 | 2.2 |
| 22 | 25.24 | 4.58 | 0.78 | 2.3 | 20 | 25.25 | 4.58 | 0.78 | 2.3 |
| 38 | 24.90 | 4.52 | 0.80 | 2.0 | 30 | 25.22 | 4.55 | 0.78 | 2.1 |
| 55 | 20.81 | 3.48 | 1.15 | 5.9 | 50 | 22.00 | 4.35 | 0.87 | 3.5 |
| 71 | 14.86 | 2.08 | 1.60 | 14.2 | 75 | 14.53 | 2.01 | 1.63 | 14.7 |
| 90 | 14.06 | 1.86 | 1.71 | 15.1 | 100 | 13.86 | 1.81 | 1.73 | 15.5 |
| 134 | 13.28 | 1.76 | 1.79 | 17.3 | 150 | 13.04 | 1.65 | 1.84 | 18 |
| 178 | 12.78 | 1.36 | 1.96 | 20.0 | 200 | 12.62 | 0.86 | 2.14 | 22 |
| 224 | 12.46 | 0.41 | 2.25 | 24.3 | 250 | 12.17 | 0.27 | 2.29 | 27 |
| 260 | 12.05 | 0.24 | 2.31 | 28.1 | 300 | 11.51 | 0.20 | 2.39 | 31 |
| 347 | 10.79 | 0.17 | 2.49 | 34.0 | 400 | 9.68 | 0.19 | 2.60 | 38 |
| 438 | 9.08 | 0.28 | 2.65 | 40.9 | 500 | 8.28 | 0.67 | 2.61 | 43 |
| 539 | 7.71 | 1.00 | 2.59 | 43.9 | 600 | 6.93 | 1.43 | 2.75 | 49 |
| | | | | | 700 | 6.01 | 1.54 | 2.86 | 59 |
| 441a) | 8.95 | 0.26 | 2.79 | 43.7 | 800 | 5.37 | 1.59 | 2.88 | 69 |
| 605 | 6.86 | 1.47 | 2.76 | 49.0 | 1000 | 4.49 | 2.00 | 2.83 | 82 |
| 687 | 6.10 | 1.53 | 2.84 | 57.2 | 1200 | 3.68 | 2.09 | 2.86 | 101 |
| 726 | 5.85 | 1.62 | 2.88 | 62.3 | 1500 | 2.99 | 2.16 | 2.82 | 121 |
| 769 | 5.54 | 1.61 | 2.86 | 65.7 | | | | | |
| 809 | 5.33 | 1.58 | 2.88 | 69.8 | | | | | |
| 853 | 5.13 | 1.72 | 2.84 | 72.7 | | | | | |
| 936 | 4.76 | 1.94 | 2.82 | 78.1 | | | | | |
| 1205 | 3.67 | 2.09 | 2.86 | 102.3 | | | | | |
| 1711 | 2.64 | 2.19 | 2.76 | 135.2 | | | | | |

HORIZON; June 3, 1952; 0230 GCT; 4°06'S, 116°06'W; sounding, 2325 fm; wind, 060°, force 4; weather, partly cloudy; sea, very rough; wire angle, 48°. 37

| | | | | | |
|---|---|---|---|---|---|
| 0 | 25.39 | 4.55 | 0 | 25.39 | 4.55 |
| 6 | 25.39 | 4.53 | 10 | 25.39 | 4.54 |
| 18 | 25.38 | 4.57 | 20 | 25.38 | 4.57 |
| 36 | 25.34 | 4.50 | 30 | 25.32 | 4.56 |
| 52 | 20.36 | 3.40 | 50 | 23.50 | 3.60 |
| 67 | 15.30 | 1.84 | 75 | 14.73 | 1.66 |
| 96 | 13.94 | 1.58 | 100 | 13.80 | 1.61 |
| 127 | 13.36 | 1.64 | 150 | 13.10 | 1.53 |
| 153 | 13.07 | 1.50 | 200 | 12.70 | 1.24 |
| 178 | 12.81 | 1.34 | 250 | 12.44 | 0.76 |
| 233 | 12.56 | 1.00 | 300 | 11.85 | 0.20 |
| 295 | 11.94 | 0.21 | 400 | 9.96 | 0.33 |
| 355 | 10.84 | 0.20 | 500 | 8.29 | 0.47 |
| 486 | 8.48 | 0.47 | 600 | 7.01 | 0.66 |
| 620 | 6.76 | 0.73 | 700 | 5.92 | 1.18 |
| 776 | 5.24 | 1.80 | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

38 HORIZON; June 3, 1952; 1104, 1224, 1335 GCT; 5°09'S, 115°41'W; sounding, 2360 fm; wind, 090°, force 3; weather, missing; sea, rough; wire angle, 45°, 45°, 40°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.93 | 4.62 | 0.50 | 0 | 0 | 26.93 | 4.62 | 0.50 | 0 |
| 8 | 26.94 | 4.58 | 0.50 | 0 | 10 | 26.96 | 4.58 | 0.50 | 0 |
| 17 | 26.98 | 4.58 | 0.51 | 0 | 20 | 26.97 | 4.58 | 0.51 | 0 |
| 30 | 26.96 | 4.57 | 0.50 | 0 | 30 | 26.96 | 4.57 | 0.50 | 0 |
| 42 | 26.94 | 4.57 | 0.52 | 0 | 50 | 26.94 | 4.56 | 0.51 | 0.2 |
| 55 | 26.94 | 4.55 | 0.51 | 0.2 | 75 | 24.13 | 4.53 | 0.78 | 1.00 |
| 71 | 24.44 | 4.57 | 0.73 | 0.5 | 100 | 20.80 | 4.00 | 1.06 | 2.2 |
| 110 | 18.63 | 3.19 | 1.28 | 3.2 | 150 | 13.37 | 1.46 | 1.98 | 17 |
| 129 | 14.52 | 1.41 | 1.97 | 11.2 | 200 | 12.17 | 1.65 | 1.99 | 24 |
| | | | | | 250 | 11.45 | 0.65 | 2.07 | 23 |
| 197 | 12.21 | 1.64 | 2.00 | 23.6 | 300 | 10.69 | 0.74 | 2.36 | 30 |
| 235 | 11.67 | 1.62 | 2.02 | 22.1 | 400 | 9.17 | 0.37 | 2.65 | 40 |
| 330 | 10.22 | 0.35 | 2.54a) | 34.2 | 500 | 7.97 | 0.85 | 2.69 | 42 |
| 428 | 8.80 | 0.42 | 2.68 | 41.6 | 600 | 6.96 | 0.99 | 2.76 | 48 |
| 526 | 7.71 | 1.04 | 2.60 | 42.5 | 700 | 6.10 | 0.99 | 2.84 | 59 |
| | | | | | 800 | 5.33 | 1.43 | 2.86 | 71 |
| 534 | 7.93 | 0.95 | 2.68b) | 43.4 | 1000 | 4.41 | 1.86 | 2.77 | 84 |
| 719 | 5.96 | 0.99 | 2.88 | 61.4 | 1200 | 3.77 | 2.16 | 2.74 | 91 |
| 812 | 5.23 | 1.46 | 2.86 | 72.2 | | | | | |
| 857 | 4.94 | 1.60 | 2.85 | 76.0 | | | | | |
| 909 | 4.72 | 1.74 | 2.83 | 80.5 | | | | | |
| 954 | 4.53 | 1.81 | 2.82 | 83.7 | | | | | |
| 1004 | 4.38 | 1.87 | 2.77 | 83.5 | | | | | |
| 1104 | 4.06 | 2.08 | 2.75 | 91.3 | | | | | |
| 1428 | 3.24 | 2.21 | 2.72 | 108.2 | | | | | |

39 HORIZON; June 3, 1952; 2052 GCT; 6°01'S, 115°13'W; sounding, 2290 fm; wind, 080°, force 4; weather, partly cloudy; sea, rough; wire angle, 27°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 27.09 | 4.57 | 0 | 27.09 | 4.57 |
| 8 | 27.08 | 4.61 | 10 | 27.07 | 4.61 |
| 24 | 27.06 | 4.62 | 20 | 27.06 | 4.62 |
| 48 | 27.03 | 4.58 | 30 | 27.05 | 4.61 |
| 72 | 24.18 | 4.63 | 50 | 27.03 | 4.59 |
| 96 | 19.90 | 3.75 | 75 | 23.72 | 4.57 |
| 142 | 13.14 | 1.02 | 100 | 19.40 | 3.43 |
| 188 | 11.94 | 0.26 | 150 | 12.80 | 0.80 |
| 234 | 11.33 | 0.30 | 200 | 11.77 | 0.27 |
| 279 | 10.73 | 0.20 | 250 | 11.11 | 0.26 |
| 368 | 9.53 | 0.29 | 300 | 10.45 | 0.20 |
| 459 | 8.07 | 1.41 | 400 | 8.96 | 0.60 |
| 550 | 7.14 | 1.59 | 500 | 7.63 | 1.57 |
| 742 | 5.67 | 1.10 | 600 | 6.69 | 1.47 |
| 933 | 4.64 | 1.69 | 700 | 5.94 | 1.15 |
| 1122 | 3.93 | 2.08 | 800 | 5.34 | 1.23 |
| | | | 1000 | 4.37 | 1.85 |

a) Mean value of 2.51 and 2.58 µg at/L.
c) Mean value of 2.63 and 2.70 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 4, 1952; 1022, 1201 GCT; 7°00'S, 114°59'W; sounding, 2360 fm; wind, 060°, force 2; weather, partly cloudy; sea, rough; wire angle, 13°, 25°. 40

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.00 | 4.38 | 0.46 | 0 | 0 | 27.00 | 4.38 | 0.46 | 0 |
| 10 | 27.00 | 4.60 | 0.46 | 0.4 | 10 | 27.00 | 4.60 | 0.46 | 0.5 |
| 24 | 27.01 | 4.67 | 0.47 | 0.7 | 20 | 27.01 | 4.65 | 0.47 | 0.7 |
| 43 | 27.00 | 4.59 | 0.46 | 0.2 | 30 | 27.00 | 4.63 | 0.47 | 0.6 |
| 62 | 26.70 | 4.64 | 0.49 | 0.5 | 50 | 27.00 | 4.53 | 0.46 | 0.3 |
| 81 | 22.81 | 4.52 | 0.75 | 0.9 | 75 | 19.80 | 4.57 | 0.73 | 0.8 |
| 104 | 20.75 | 4.38 | 0.74 | 2.3 | 100 | 21.28 | 4.43 | 0.74 | 2.0 |
| 153 | 14.91 | 1.99 | 1.71 | 16.2 | 150 | 15.40 | 2.14 | 1.64 | 15.0 |
| 202 | 12.15 | 0.75 | 2.23 | 23.2 | 200 | 21.22 | 0.81 | 2.21 | 23 |
| 254 | 11.44 | 0.31 | 2.43 | 28.8 | 250 | 11.49 | 0.32 | 2.42 | 29 |
| 299 | 10.76 | 0.40 | 2.48 | 31.5 | 300 | 10.73 | 0.40 | 2.48 | 32 |
| 403 | 9.42 | 0.33 | 2.60 | 36.9 | 400 | 9.45 | 0.33 | 2.59 | 37 |
| 505 | 7.98 | 0.77 | 2.68 | 41.6 | 500 | 8.03 | 0.74 | 2.67 | 42 |
| 615 | 6.89 | 0.87 | 2.74 | 47.0 | 600 | 7.01 | 0.85 | 2.73 | 47 |
| | | | | | 700 | 6.16 | 0.94 | 2.76 | 58 |
| 459a) | 8.74 | 0.57 | 2.52 | 40.9 | 800 | 5.44 | 1.38 | 2.72 | 69 |
| 548 | 7.49 | 0.94 | 2.58 | 44.8 | 1000 | 4.38 | 2.17 | 2.68 | 90 |
| 733 | 5.91 | 1.02 | 2.76 | 62.3 | 1200 | 3.54 | 2.43 | 2.60 | 104 |
| 828 | 5.29 | 1.52 | 2.70 | 70.6 | 1500 | 2.90 | 2.55 | 2.54 | |
| 875 | 5.04 | 1.71 | 2.69 | 79.0 | 2000 | 2.19 | 2.76 | 2.44 | |
| 923 | 4.77 | 1.93 | 2.69 | 79.4 | 2500 | (1.83) | | | |
| 972 | 4.51 | 2.13 | 2.68 | 88.2 | | | | | |
| 1020 | 4.32 | 2.18 | 2.67 | 90.7 | | | | | |
| 1117 | 3.89 | 2.35 | 2.62 | 99.0 | | | | | |
| 1416 | 3.10 | 2.51 | 2.56 | 111.4 | | | | | |
| 1925 | 2.26 | 2.71 | 2.44 | 108.2 | | | | | |
| 2466 | 1.85 | 2.99 | 2.42 | 143.8 | | | | | |

HORIZON; June 4, 1952; 1322, 1605 GCT; 7°00'S, 114°59'W; sounding, 2360 fm; wind, 060°, force 2; weather, partly cloudy; sea, rough; wire angle, 15°, 37°. (SPECIAL) 40

| | | | |
|---|---|---|---|
| 202 | 12.51 | | |
| 299 | 10.84 | | |
| 403 | 9.49 | | |
| 505 | 7.92 | | |
| | | | |
| 161a) | 14.42 | | |
| 578 | 7.31 | | |
| 665 | 6.40 | | |
| 847 | 5.18 | 200 | (12.55) |
| 1034 | 4.30 | 250 | 11.46 |
| 1324 | 3.29 | 300 | 10.83 |
| 1824 | 2.42 | 400 | 9.52 |
| 2344 | 1.92 | 500 | 8.00 |
| | | 600 | 7.09 |
| | | 700 | 6.11 |
| | | 800 | 5.45 |
| | | 1000 | 4.45 |
| | | 1200 | 3.70 |
| | | 1500 | 2.87 |
| | | 2000 | 2.23 |

a) Overlapping casts; reconciliation of property curves when necessary.

41

HORIZON; June 4, 1952; 2330 GCT; 6°08'S, 114°30'W; sounding, 2370 fm; wind, 060°, force 4; weather, partly cloudy; sea, rough; wire angle, 25°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 27.12 | 4.55 | | | 0 | 27.12 | 4.55 | | |
| 9 | 27.10 | 4.61 | | | 10 | 27.10 | 4.61 | | |
| 23 | 27.08 | 4.61 | | | 20 | 27.08 | 4.61 | | |
| 49 | 27.04 | 4.57 | | | 30 | 27.07 | 4.59 | | |
| 70 | 25.18 | 4.84 | | | 50 | 27.04 | 4.57 | | |
| 95 | 20.67 | 4.16 | | | 75 | 24.37 | 4.77 | | |
| 139 | 14.52 | 1.88 | | | 100 | 20.05 | 3.92 | | |
| 181 | 12.20 | 0.78 | | | 150 | 13.50 | 1.61 | | |
| 228 | 11.40 | 0.30 | | | 200 | 11.83 | 0.50 | | |
| 267 | 10.86 | 0.27 | | | 250 | 11.08 | 0.27 | | |
| 358 | 9.56 | 0.36 | | | 300 | 10.37 | 0.26 | | |
| 444 | 8.38 | 0.71 | | | 400 | 8.96 | 0.54 | | |
| 533 | 7.34 | 1.02 | | | 500 | 7.71 | 0.95 | | |
| 708 | 5.90 | 1.13 | | | 600 | 6.71 | 1.06 | | |
| 891 | 4.82 | 1.46 | | | 700 | 5.94 | 1.12 | | |
| 1080 | 4.09 | 1.96 | | | 800 | 5.31 | 1.28 | | |
| | | | | | 1000 | 4.35 | 1.73 | | |

42

HORIZON; June 5, 1952; 0711, 0744, 0910 GCT; 5°21'S, 113°52'W; sounding, 2365 fm; wind, 110°, force 3; weather, partly cloudy; sea, very rough; wire angle, 32°, 37°, 36°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.72 | 4.69 | 0.84 | 2.0 | 0 | 25.72 | 4.69 | 0.84 | 2.0 |
| 9 | 25.72 | 4.71 | 0.85 | 4.7 | 10 | 25.73 | 4.71 | 0.85 | 2.8 |
| 21 | 25.75 | 4.72 | 0.83 | 1.8 | 20 | 25.75 | 4.72 | 0.83 | 1.8 |
| 37 | 25.65 | 4.67 | 0.82 | 2.3 | 30 | 25.67 | 4.70 | 0.82 | 2.1 |
| 53 | 25.61 | 4.63 | 0.82 | 2.3 | 50 | 25.64 | 4.63 | 0.82 | 2.3 |
| 68 | 24.79 | 4.74 | 0.69 | 1.3 | 75 | 23.74 | 4.67 | 0.84 | 1.3 |
| 87 | 20.02 | 4.28 | 0.86 | 1.6 | 100 | 16.45 | 3.79 | 1.60 | 5 |
| 127 | 13.66 | 0.30 | 2.31 | 15.3 | 150 | 12.47 | 0.17 | 2.38 | 23 |
| 164 | 12.19 | 0.14 | 2.45a) | 26.3 | 200 | 11.84 | 0.20 | 2.48 | 28 |
| | | | | | 250 | 11.14 | 0.30 | 2.50 | 31 |
| 217 | 11.67 | 0.22 | 2.50 | 29.0 | 300 | 10.42 | 0.28 | 2.54 | 34 |
| 256 | 11.06 | 0.30 | 2.50 | 31.5 | 400 | 9.05 | 0.33 | 2.64 | 40 |
| 351 | 9.76 | 0.28 | 2.60 | 36.7 | 500 | 8.04 | 0.91 | 2.64 | 44 |
| 448 | 8.59 | 0.49 | 2.65 | 41.6 | 600 | 7.06 | 1.27 | 2.64 | 51 |
| 552 | 7.54 | 1.27 | 2.63 | 41.9 | 700 | 6.03 | 1.30 | 2.68 | 62 |
| | | | | | 800 | 5.15 | 1.47 | 2.73 | 72 |
| 540b) | 7.46 | 1.24 | 2.26 | 45.9 | 1000 | 4.26 | 1.90 | 2.73 | 91 |
| 742 | 5.59 | 1.33 | 2.47 | 65.9 | 1200 | 3.70 | 2.18 | 2.67 | 107 |
| 842 | 4.97 | 1.60 | 2.75c) | 74.7 | 1500 | 2.94 | 2.41 | 2.61 | 117 |
| 890 | 4.77 | 1.74 | 2.75 | 78.7 | 2000 | 2.24 | 2.63 | 2.55 | 140 |
| 943 | 4.50 | 1.78 | 2.74 | 83.7 | 2500 | 1.87 | 2.88 | 2.48 | 145 |
| 991 | 4.29 | 1.89 | 2.73 | 88.6 | | | | | |
| 1044 | 4.13 | 1.91 | 2.72 | 99.5 | | | | | |
| 1146 | 3.84 | 2.11 | 2.68 | 174.2u | | | | | |
| 1466 | 3.02 | 2.39 | 2.62 | 115.7 | | | | | |
| 2047 | 2.20 | 2.65 | 2.54 | 140.8 | | | | | |
| 2643 | 1.82 | 3.00 | 2.46 | 146 | | | | | |

a) Alternate value, 2.38 µg at/L, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Alternate value, 2.68 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 5, 1952; 1630 GCT; 4°29.5'S, 113°21'W; sounding, 2280 fm; wind, 090°, force 4; weather, partly cloudy; sea, rough; wire angle, 40°. 43

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.22 | 4.53 | | | 0 | 25.22 | 4.53 | | |
| 8 | 25.20 | 4.58 | | | 10 | 25.20 | 4.59 | | |
| 22 | 25.20 | 4.64 | | | 20 | 25.20 | 4.63 | | |
| 41 | 25.10 | 4.60 | | | 30 | 25.15 | 4.64 | | |
| 62 | 19.36 | 2.94 | | | 50 | 25.04 | 4.46 | | |
| 82 | 15.75 | 1.90 | | | 75 | 16.27 | 2.12 | | |
| 122 | 13.09 | 0.80 | | | 100 | 14.35 | 1.25 | | |
| 161 | 12.66 | 0.70 | | | 150 | 12.80 | 0.71 | | |
| 199 | 12.27 | - | | | 200 | 12.26 | 0.68 | | |
| 237 | 12.01 | 0.60 | | | 250 | 11.84 | 0.55 | | |
| 308 | 10.84 | 0.20 | | | 300 | 10.99 | 0.20 | | |
| 389 | 9.48 | 0.20 | | | 400 | 9.31 | 0.23 | | |
| 466 | 8.42 | 0.60 | | | 500 | 8.06 | 0.82 | | |
| 638 | 6.66 | 0.85 | | | 600 | 7.03 | 1.34 | | |
| 820 | 5.14 | 1.43 | | | 700 | 6.06 | 1.44 | | |
| 1006 | 4.26 | 1.91 | | | 800 | 5.26 | 1.43 | | |
| | | | | | 1000 | 4.28 | 1.90 | | |

HORIZON; June 6, 1952; 0000, 0125 GCT; 3°38'S, 112°49'W; sounding, 2265 fm; wind, 110°, force 4; weather, partly cloudy; sea, moderate; wire angle, 21°, 31°. 44

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.16 | 4.65 | 0.84 | 2.9 | 0 | 25.16 | 4.65 | 0.84 | 2.8 |
| 9 | 25.02 | 4.64 | 0.88 | 2.5 | 10 | 25.01 | 4.64 | 0.88 | 2.4 |
| 26 | 24.86 | 4.64 | 0.86 | 1.8 | 20 | 24.90 | 4.64 | 0.87 | 2.0 |
| 39 | 24.68 | 4.60 | 0.86 | 2.2 | 30 | 24.84 | 4.63 | 0.86 | 2.1 |
| 61 | 16.82 | 2.38 | 1.54 | 7.4 | 50 | 18.90 | 4.00 | 1.16 | 4.2 |
| 83 | 14.84 | 1.47 | 1.82 | 15.8 | 75 | 15.42 | 1.68 | 1.74 | 13.5 |
| 104 | 13.54 | 1.15 | 1.97 | 20.0 | 100 | 13.74 | 1.21 | 1.94 | 19 |
| 155 | 12.95 | 0.68 | 2.09 | 22.3 | 150 | 13.00 | 0.71 | 2.08 | 22 |
| 205 | 12.47 | 0.48 | 2.20 | 24.7 | 200 | 12.49 | 0.50 | 2.19 | 24 |
| 255 | 12.04 | 0.27 | 2.35 | 27.4 | 250 | 12.06 | 0.28 | 2.34 | 27 |
| 303 | 11.34 | 0.18 | 2.43 | 30.4 | 300 | 11.42 | 0.19 | 2.42 | 30 |
| 398 | 9.36 | 0.22 | 2.58 | 39.2 | 400 | 9.33 | 0.23 | 2.58 | 39 |
| 502 | 7.86 | 0.85 | 2.61 | 44.8 | 500 | 7.90 | 0.84 | 2.61 | 45 |
| 607 | 6.67 | 1.39 | 2.72 | 51.8 | 600 | 6.74 | | 2.71 | 51 |
| | | | | | 700 | 6.04 | | 2.76 | 60 |
| 560a) | 7.19 | 0.89 | 2.76 | 49.1 | 800 | 5.55 | 1.64 | 2.80 | 70 |
| 756 | 5.78 | 1.53 | 2.78 | 49.1u | 1000 | 4.49 | 1.65 | 2.89 | 91 |
| 855 | 5.14 | 1.71 | 2.82 | 75.8 | 1200 | 3.75 | 2.08 | 2.85 | 104 |
| 902 | 4.86 | 1.66 | 2.82 | 80.5 | 1500 | 3.01 | 2.21 | 2.79 | 123 |
| 955 | 4.64 | 1.55 | 2.85 | 87.1 | 2000 | 2.30 | 2.54 | 2.69 | 141 |
| 1003 | 4.48 | 1.65 | 2.89 | 91.6 | 2500 | 1.91 | 2.94 | 2.65 | 145 |
| 1056 | 4.33 | 1.68 | 2.92 | 94.0 | | | | | |
| 1158 | 3.92 | 2.00 | 2.86 | 101.0 | | | | | |
| 1482 | 3.03 | 2.20 | 2.80 | 121.7 | | | | | |
| 2075 | 2.23 | 2.61 | 2.68 | 143.3 | | | | | |
| 2668 | 1.82 | 3.01 | 2.63 | 145 | | | | | |

a) Overlapping casts; reconciliaiton of property curves when necessary.

45

HORIZON; June 6, 1952; 0828, 0857 GCT; 2°47'S, 112°13'W; sounding, 2780 fm; wind, 120°, force 3; weather, partly cloudy; sea, rough; wire angle, 05°, 09°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 24.07 | 4.43 | | | 0 | 24.07 | 4.43 | | |
| 10 | 24.07 | 4.43 | | | 10 | 24.07 | 4.43 | | |
| 30 | 23.95 | 4.39 | | | 20 | 24.03 | 4.42 | | |
| 58 | 18.34 | 2.69 | | | 30 | 23.95 | 4.39 | | |
| 87 | 13.79 | 1.67 | | | 50 | 20.85 | 4.02 | | |
| 116 | 13.29 | 1.69 | | | 75 | 15.35 | 1.78 | | |
| 171 | 12.73 | 0.86 | | | 100 | 13.48 | 1.66 | | |
| 226 | 12.30 | 0.30 | | | 150 | 12.93 | 1.39 | | |
| 283 | 11.77 | 0.26 | | | 200 | 12.51 | 0.47 | | |
| | | | | | 250 | 12.09 | 0.27 | | |
| 336 | 10.50 | 0.20 | | | 300 | 11.50 | 0.24 | | |
| 444 | 8.39 | 0.84 | | | 400 | 9.13 | 0.60 | | |
| 556 | 7.18 | 0.98 | | | 500 | 7.78 | 0.87 | | |
| 663 | 6.08 | 1.48 | | | 600 | 6.69 | 1.23 | | |
| 884 | 4.97 | 1.64 | | | 700 | 7.85 | 1.50 | | |
| 1096 | 4.16 | 1.96 | | | 800 | 5.34 | 1.56 | | |
| 1302 | 3.57 | 2.07 | | | 1000 | 4.50 | 1.84 | | |
| | | | | | 1200 | 3.83 | 2.05 | | |

46

HORIZON; June 6, 1952; 1609, 1732 GCT; 1°56'S, 111°48'W; sounding, 2200 fm; wind, 120°, force 2; weather, clear; sea, very rough; wire angle, 17°, 18°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 23.42 | 4.40 | 0.72 | 3.8 | 0 | 23.42 | 4.40 | 0.72 | 3.8 |
| 9 | 23.34 | 4.40 | 0.74 | 5.0 | 10 | 23.31 | 4.38 | 0.74 | 5.0 |
| 28 | 22.66 | 4.14 | 0.76 | 37.6u | 20 | 22.93 | 4.29 | 0.75 | 4.7 |
| 41 | 22.40 | 3.91 | 0.85 | 3.2 | 30 | 22.10 | 4.12 | 0.76 | 3.9 |
| 64 | 18.46 | 2.66 | 1.38 | 9.5 | 50 | 22.26 | 3.62 | 1.01 | 4.3 |
| 87 | 14.90 | 1.41 | 1.79 | 16.0 | 75 | 15.92 | 1.64 | 1.62 | 12.8 |
| 109 | 13.45 | 1.50 | 1.83 | 18.9 | 100 | 13.91 | 1.45 | 1.82 | 18 |
| 164 | 12.38 | 1.38 | 1.94 | 23.6 | 150 | 12.47 | 1.42 | 1.91 | 23 |
| 218 | 12.04 | 1.20 | 2.00 | 28.1 | 200 | 12.15 | 1.28 | 1.98 | 27 |
| 271 | 11.76 | 0.72 | 2.20 | 28.4 | 250 | 11.85 | 0.92 | 2.12 | 28 |
| 326 | 11.53 | 0.55 | 2.24 | 27.9 | 300 | 11.65 | 0.58 | 2.23 | 28 |
| 430 | 9.33 | 0.65 | 2.49 | 37.3 | 400 | 10.39 | 0.58 | 2.43 | 34 |
| 540 | 6.88 | 1.68 | 2.49 | 48.2 | 500 | 7.39 | 1.35 | 2.49 | 44 |
| 650 | 6.24 | 1.79 | 2.50 | 59.0 | 600 | 6.50 | 1.79 | 2.49 | 54 |
| | | | | | 700 | 6.00 | 1.87 | 2.55 | 62 |
| 497a) | 7.84 | 0.90 | 2.62 | 55.6 | 800 | 5.57 | 2.03 | 2.69 | 63 |
| 593 | 6.57 | 1.79 | 2.64 | 52.7 | 1000 | 4.47 | 1.87 | 2.84 | 88 |
| 792 | 5.60 | 2.04 | 2.68 | 63.0 | 1200 | 3.75 | 2.05 | 2.73 | 105 |
| 892 | 5.20 | 1.72 | 2.82 | 74.7 | 1500 | 3.13 | 2.14 | 2.73 | 121 |
| 943 | 4.74 | 1.89 | 2.80 | 82.3 | 2000 | 2.33 | 2.43 | 2.69 | 146 |
| 994 | 4.50 | 1.85 | 2.84 | 87.7 | 2500 | 1.90 | 2.77 | 2.56 | 150 |
| 1045 | 4.33 | 2.08 | 2.81 | 89.6 | | | | | |
| 1096 | 4.12 | 1.94 | 2.78 | 96.3 | | | | | |
| 1199 | 3.76 | 2.05 | 2.77b) | 105.3 | | | | | |
| 1513 | 3.09 | 2.15 | 2.73 | 121.7 | | | | | |
| 2034 | 2.28 | 2.45 | 2.68 | 147.1 | | | | | |
| 2578 | 1.87 | 2.85 | 2.52 | 150.3 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 2.73 and 2.81 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 7, 1952; 0010 GCT; 1°00'S, 111°24'W; sounding, 2210 fm; wind, 120°, force 1; weather, partly cloudy; sea, moderate; wire angle, 45°. 47

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.38 | 4.38 | | | 0 | 23.38 | 4.33 | | |
| 6 | 22.85 | 4.29 | | | 10 | 22.70 | 4.27 | | |
| 19 | 22.34 | 4.21 | | | 20 | 22.30 | 4.20 | | |
| 39 | 21.03 | 3.86 | | | 30 | 21.59 | 4.04 | | |
| 53 | 19.87 | 3.30 | | | 50 | 20.10 | 3.44 | | |
| 72 | 19.21 | 2.75 | | | 75 | 18.80 | 2.71 | | |
| 110 | 15.05 | 2.15 | | | 100 | 15.65 | 2.19 | | |
| 150 | 13.48 | 2.85 | | | 150 | 13.48 | 2.85 | | |
| 192 | 12.80 | 2.78 | | | 200 | 12.59 | 2.62 | | |
| 226 | 12.12 | 1.71 | | | 250 | 11.93 | 1.23 | | |
| 311 | 11.38 | 0.44 | | | 300 | 11.53 | 0.52 | | |
| 392 | 9.74 | 0.64 | | | 400 | 9.60 | 0.64 | | |
| 476 | 8.24 | 0.78 | | | 500 | 7.86 | 0.86 | | |
| 644 | 6.40 | 1.49 | | | 600 | 6.71 | 1.28 | | |
| 818 | 5.50 | 1.93 | | | 700 | 6.10 | 1.66 | | |
| 1007 | 4.34 | 2.02 | | | 800 | 5.59 | 1.90 | | |
| | | | | | 1000 | 4.40 | 2.02 | | |

HORIZON; June 7, 1952; 0715, 0855 GCT; 0°08'S, 110°40'W; sounding, 2140 fm; wind, 120°, force 1; weather, cloudy; sea, rough; wire angle, 53°, 62°. 48

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.00 | 4.33 | 0.76 | 5.6 | 0 | 23.00 | 4.33 | 0.76 | 5.6 |
| 6 | 22.96 | 4.33 | 0.80 | 4.9 | 10 | 22.45 | 4.32 | 0.84 | 5.4 |
| 14 | 21.88 | 4.13 | 0.88 | 6.5 | 20 | 21.15 | 3.73 | 0.86 | 7.3 |
| 21 | 21.09 | 3.79 | 0.93 | 7.9 | 30 | 20.33 | 3.71 | 1.01 | 10.3 |
| 30 | 20.33 | 3.71 | 1.01 | 10.3 | 50 | 16.00 | 2.58 | 1.37 | 15.6 |
| 43 | 16.71 | 2.57 | 1.33 | 14.6 | 75 | 15.00 | 2.96 | 1.33 | 16 |
| 54 | 15.66 | 2.68 | 1.38 | 15.8 | 100 | 14.37 | 3.03 | 1.31 | 14 |
| 82 | 14.80 | 3.04 | 1.31 | 16.0 | 150 | 13.20 | 2.71 | 1.52 | 18 |
| 112 | 14.95 | 3.02 | 1.31 | 12.1 | 200 | 12.44 | 2.26 | 1.70 | 19 |
| 141 | 13.40 | 2.77 | 1.48 | 18.0 | 250 | 12.13 | 1.46 | 1.93 | 23 |
| 167 | 12.86 | 2.61 | 1.58 | 17.5 | 300 | 11.78 | 0.70 | 2.16 | 26 |
| 227 | 12.24 | 1.89 | 1.81 | 21.2 | 400 | 9.15 | 0.46 | 2.56 | 41 |
| 297 | 11.86 | 0.73 | 2.15 | 25.6 | 500 | 7.99 | 0.74 | 2.64 | 46 |
| 389 | 9.39 | 0.42 | 2.54 | 40.3 | 600 | 7.12 | 1.17 | 2.66 | 55 |
| | | | | | 700 | 6.17 | 1.43 | 2.66 | 62 |
| 516 | 7.84 | 0.80 | 2.65 | 46.8 | 800 | 5.64 | 1.51 | 2.76 | 69 |
| 634 | 6.84 | 1.33 | 2.66 | 76.0u | | | | | |
| 696 | 6.18 | 1.43 | 2.66 | 62.3 | | | | | |
| 726 | 6.13 | 1.41 | 2.72 | 63.0 | | | | | |
| 760 | 5.79 | 1.59 | 2.79 | 64.3 | | | | | |
| 798 | 5.66 | 1.51 | 2.76 | 68.6 | | | | | |
| 830 | 5.50 | 1.62 | 2.76 | 69.8 | | | | | |
| 899 | 5.08 | 1.80 | 2.76 | 76.7 | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

49 HORIZON; June 7, 1952; 1925 GCT; 0°43'N, 110°13'W; sounding, 2090 fm; wind, 140°, force 2; weather, cloudy; sea, moderate; wire angle, 50°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.53 | 4.17 | | | 0 | 22.53 | 4.17 | | |
| 6 | 22.24 | 4.14 | | | 10 | 22.23 | 4.13 | | |
| 18 | 22.20 | 4.12 | | | 20 | 22.19 | 4.11 | | |
| 34 | 21.84 | 3.99 | | | 30 | 22.15 | 4.04 | | |
| 50 | 16.60 | 2.27 | | | 50 | 16.60 | 2.27 | | |
| 67 | 15.18 | 2.03 | | | 75 | 14.75 | 1.85 | | |
| 96 | 13.73 | 1.59 | | | 100 | 13.45 | 1.60 | | |
| 125 | 12.76 | 1.82 | | | 150 | 12.52 | 2.42 | | |
| 153 | 12.49 | 2.44 | | | 200 | 12.34 | 2.13 | | |
| 179 | 12.42 | 2.29 | | | 250 | 12.24 | 1.80 | | |
| 228 | 12.28 | 1.94 | | | 300 | 12.10 | 1.20 | | |
| 281 | 12.19 | 1.51 | | | 400 | 10.32 | 0.43 | | |
| 335 | 11.82 | 0.68 | | | 500 | 8.36 | 0.50 | | |
| 447 | 9.20 | 0.42 | | | 600 | 7.14 | 0.96 | | |
| 559 | 7.63 | 0.71 | | | | | | | |
| 674 | 6.48 | 1.59 | | | | | | | |

50 HORIZON; June 8, 1952; 0126, 0255 GCT; 1°27'N, 109°40'W; sounding, 2040 fm; wind, 120°, force 3; weather, cloudy; sea, very rough; wire angle, 28°, 40°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.50 | 4.60 | 0.92 | 7.4 | 0 | 23.50 | 4.60 | 0.92 | 7.4 |
| 8 | 23.48 | 4.61 | 0.95 | 6.5 | 10 | 23.47 | 4.61 | 0.95 | 6.6 |
| 26 | 23.32 | 4.54 | 0.91 | 9.4 | 20 | 23.43 | 4.58 | 0.92 | 8.0 |
| 38 | 22.79 | 4.42 | 0.92 | 15.8 | 30 | 23.28 | 4.52 | 0.91 | |
| 58 | 18.73 | 3.13 | 1.26 | 10.1 | 50 | 22.69 | 4.22 | 1.04 | |
| 77 | 15.74 | 1.87 | 1.71 | 16.9 | 75 | 16.05 | 1.87 | 1.70 | |
| 96 | 13.66 | 2.01 | 1.72a) | 27.5 | 100 | 13.48 | 2.00 | 1.73 | |
| 143 | 12.46 | 1.80 | 1.86 | 21.4 | 150 | 12.43 | 1.76 | 1.88 | |
| 189 | 12.24 | 1.60 | 1.94 | 27.0 | 200 | 12.22 | 1.54 | 1.96 | 27 |
| 234 | 12.14 | 1.39 | 2.04 | 23.6 | 250 | 12.08 | 1.25 | 2.08 | 24 |
| 281 | 11.97 | 0.94 | 2.15 | 25.7 | 300 | 11.83 | 0.82 | 2.19 | 28 |
| 376 | 10.54 | 0.57 | 2.38 | 35.1 | 400 | 9.99 | 0.59 | 2.44 | 37 |
| 481 | 8.39 | 0.66 | 2.64 | 44.6 | 500 | 8.19 | 0.73 | 2.65 | 46 |
| 593 | 7.20 | 1.15 | 2.67 | 53.6 | 600 | 7.14 | 1.18 | 2.67 | 54 |
| | | | | | 700 | 6.54 | 1.46 | 2.66 | |
| 496b) | 8.30 | 0.71 | 2.65 | 43.6 | 800 | 5.70 | 1.68 | 2.71 | |
| 673 | 6.73 | 1.34 | 2.66 | 54.0 | 1000 | 4.42 | 1.82 | 2.78 | 91 |
| 764 | 5.90 | 1.66 | 2.66 | 63.0 | 1200 | 3.70 | 1.86 | 2.78 | 109 |
| 808 | 5.64 | 1.69 | 2.72 | 68.0 | 1500 | 3.12 | 1.96 | 2.77 | 126 |
| 859 | 5.11 | 1.82 | 2.76 | 74.7 | 2000 | 2.25 | 2.45 | 2.66 | 143 |
| 902 | 4.89 | 1.80 | 2.74 | 79.6 | 2500 | (1.84) | (2.81) | (2.52) | (150.4) |
| 953 | 4.64 | 1.78 | 2.78 | 86.0 | | | | | |
| 1050 | 4.23 | 1.86 | 2.78 | 95.9 | | | | | |
| 1358 | 3.36 | 1.86 | 2.78 | 118.6 | | | | | |
| 1921 | 2.35 | 2.39 | 2.68 | 141.3 | | | | | |
| 2496 | 1.84 | 2.80 | 2.52 | 150.3 | | | | | |

a) Mean value of 1.69 and 1.76 µg at/L.

b Overlapping casts; reconciliation of property curves when necessary.

HORIZON; June 8, 1952; 1011 GCT; 2°16'N, 109°12'W; sounding, 2085 fm; wind, direction missing, force 3; weather, cloudy; sea, smooth; wire angle, 48°. 51

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 26.27 | 4.64 | | | 0 | 26.27 | 4.64 | | |
| 6 | 26.29 | 3.85 | | | 10 | 26.29 | 4.65 | | |
| 18 | 26.30 | 4.67 | | | 20 | 26.30 | 4.67 | | |
| 40 | 24.92 | 4.60 | | | 30 | 26.10 | 4.66 | | |
| 50 | 20.84 | 3.46 | | | 50 | 20.84 | 3.46 | | |
| 66 | 16.32 | 2.37 | | | 75 | 15.30 | 1.86 | | |
| 98 | 14.00 | 1.48 | | | 100 | 13.95 | 1.48 | | |
| 129 | 13.42 | 1.72 | | | 150 | 13.05 | 1.64 | | |
| 160 | 12.94 | 1.41 | | | 200 | 12.63 | 1.49 | | |
| 182 | 12.78 | 1.60 | | | 250 | 12.10 | 0.85 | | |
| 233 | 12.34 | 0.96 | | | 300 | 11.33 | 0.81 | | |
| 280 | 11.66 | 0.73 | | | 400 | 9.51 | 0.67 | | |
| 330 | 10.91 | 0.93 | | | 500 | 7.90 | 0.73 | | |
| 426 | 8.99 | 0.55 | | | 600 | 7.03 | 1.09 | | |
| 534 | 7.59 | 0.84 | | | | | | | |
| 674 | 6.48 | 1.47 | | | | | | | |

HORIZON; June 8, 1952; 1815, 1957 GCT; 3°01'N, 108°43'W; sounding, 2055 fm; wind, direction missing, force 4; weather, missing; sea, missing; wire angle, 20°, 32°. 52

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.90 | 4.62 | 0.49 | 1.4 | 0 | 26.90 | 4.62 | 0.49 | 1.4 |
| 9 | 26.86 | 4.60 | 0.50 | 1.4 | 10 | 26.85 | 4.60 | 0.50 | 1.4 |
| 27 | 26.84 | 4.62 | 0.52 | 1.8 | 20 | 26.85 | 4.61 | 0.51 | 1.6 |
| 41 | 26.56 | 4.62 | 0.62 | 2.2 | 30 | 26.84 | 4.62 | 0.53 | 2.0 |
| 62 | 18.78 | 2.91 | 1.42 | 10.1 | 50 | 23.95 | 4.53 | 0.92 | 4.0 |
| 85 | 15.45 | 1.84 | 1.83 | 18.0 | 75 | 16.15 | 1.93 | 1.78 | 17 |
| 106 | 14.62 | 1.94 | 1.83 | 17.6 | 100 | 14.78 | 1.89 | 1.83 | 18 |
| 157 | 13.52 | 2.21 | 1.81 | 18.4 | 150 | 13.66 | 2.19 | 1.81 | 18 |
| 207 | 12.72 | 1.80 | 2.68 | 22.5 | 200 | 12.83 | 1.91 | | 22 |
| 259 | 12.15 | 0.83 | 3.03a) | 26.3 | 250 | 12.24 | 0.87 | | 25 |
| 311 | 11.18 | 0.73 | 3.15 | 30.4 | 300 | 11.42 | 0.77 | | 30 |
| 410 | 9.18 | 0.26 | 3.49 | 45.2 | 400 | 9.37 | 0.27 | | 44 |
| 514 | 7.45 | 0.78 | 3.62 | 53.8 | 500 | 7.62 | 0.64 | | 52 |
| 619 | 6.48 | - | 3.69 | 64.1 | 600 | 6.63 | 0.88 | | 63 |
| | | | | | 700 | 5.87 | 0.93 | | 71 |
| 290b) | 11.66 | 1.86 | 2.38 | 29.0 | 800 | 5.25 | 1.58 | | 79 |
| 524 | 7.01 | 0.72 | 3.04c) | 57.2 | 1000 | 4.45 | 1.69 | 3.02 | 93 |
| 709 | 5.82 | 0.95 | 3.03 | 71.8 | 1200 | 3.74 | 1.85 | 3.00 | 109 |
| 805 | 5.21 | 1.29 | 3.05 | 78.8 | 1500 | 3.17 | 3.16 | 2.97 | 127 |
| 851 | 4.97 | 1.50 | 3.00 | 81.2 | 2000 | 2.40 | 2.19 | 2.78 | 144 |
| 900 | 4.80 | 1.65 | 2.94 | 87.5 | 2500 | 1.87 | 2.71 | 2.65 | 155 |
| 948 | 4.62 | 1.66 | 3.00 | 90.2 | | | | | |
| 999 | 4.46 | 1.69 | 3.02 | 92.9 | | | | | |
| 1096 | 4.08 | 1.77 | 3.00 | 101.3 | | | | | |
| 1404 | 3.32 | 1.96 | 3.00d) | 122.8 | | | | | |
| 1960 | 2.44 | 2.17 | 2.80 | 143.3 | | | | | |
| 2534 | 1.84 | 2.75 | 2.64 | 156.6 | | | | | |

a) Mean value of 2.99 and 3.07 µg at/L.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Mean value of 2.98 and 3.10 µg at/L.
d) Mean value of 2.96 and 3.03 µg at/L

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | $O_2$ | $PO_4$-P | $SiO_3$-Si | Z | T | $O_2$ | $PO_4$-P | $SiO_3$-Si |
| m | °C | ml/L | µg at/L | µg at/L | m | °C | ml/L | µg at/L | µg at/L |

53 HORIZON; June 9, 1952; 0505, 0605, 0635 GCT; 3°57'N, 108°08'W; sounding, 2125 fm; wind, 140°, force 3; weather, partly cloudy; sea, rough; wire angle, 00°, 02°, missing.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.75 | | | | 0 | 27.75 | | | |
| 10 | 27.76 | | | | 10 | 27.76 | | | |
| 30 | 27.78 | | | | 20 | 27.77 | | | |
| 58 | 19.94 | | | | 30 | 27.78 | | | |
| 87 | 17.11 | | | | 50 | 20.80 | | | |
| 116 | 14.86 | | | | 75 | 18.35 | | | |
| | | | | | 100 | 15.90 | | | |
| 172 | 13.36 | | | | 150 | 13.79 | | | |
| 227 | 12.62 | | | | 200 | 12.99 | | | |
| 284 | 11.95 | | | | 250 | 12.37 | | | |
| 341 | 11.00 | | | | 300 | 11.68 | | | |
| 448 | 9.18 | | | | 400 | 9.99 | | | |
| 562 | 7.50 | | | | 500 | 8.35 | | | |
| | | | | | 600 | 7.10 | | | |
| 673 | 6.33 | | | | 700 | 6.14 | | | |
| 894 | 4.96 | | | | 800 | 5.46 | | | |
| 1106 | 4.14 | | | | 1000 | 4.54 | | | |
| 1315 | 3.45 | | | | 1200 | 3.83 | | | |

54 HORIZON; June 9, 1952; 1428, 1703 GCT; 4°56'N, 107°29'W; sounding, 2100 fm; wind, direction missing, force 3; weather, missing; sea, missing; wire angle, 00°, 15°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.17 | 4.55 | 0.33 | 0 | 0 | 28.17 | 4.55 | 0.33 | 0 |
| 9 | 28.18 | 4.57 | 0.37 | 0 | 10 | 28.18 | 4.57 | 0.37 | 0 |
| 23 | 28.23 | 4.57 | 0.37 | 0 | 20 | 28.22 | 4.57 | 0.37 | 0 |
| 41 | 27.31 | 4.58 | 0.43 | 1.3 | 30 | 28.19 | 4.58 | 0.39 | 0.2 |
| 60 | 21.48 | 4.00 | 1.04 | 5.4 | 50 | 26.40 | 4.40 | 0.51 | 2.9 |
| 79 | 17.61 | 2.64 | 1.51 | 11.9 | 75 | 18.05 | 2.90 | 1.42 | 11.0 |
| 102 | 15.10 | 1.78 | 1.83 | 16.7 | 100 | 15.30 | 1.81 | 1.82 | 16.5 |
| 155 | 13.17 | 1.43 | 2.08 | 21.1 | 150 | 13.27 | 1.47 | 2.07 | 21 |
| 207 | 12.51 | 1.07 | 2.15 | 23.8 | 200 | 12.59 | 1.09 | 2.14 | 23 |
| 264 | 11.92 | 0.86 | 2.27 | 26.5 | 250 | 12.05 | 0.90 | 2.24 | 26 |
| 311 | 11.48 | 0.87 | 2.34 | 29.0 | 300 | 11.57 | 0.61 | 2.33 | 28 |
| 419 | 9.58 | 0.40 | 2.63 | 40.7 | 400 | 10.00 | 0.35 | 2.55 | 39 |
| 526 | 7.79 | 0.31 | 2.95 | 54.4 | 500 | 8.10 | 0.29 | 2.90 | 51 |
| 633 | 6.72 | 0.76 | 2.88 | 60.5 | 600 | 7.03 | 0.60 | 2.90 | 59 |
| | | | | | 700 | 6.24 | 0.86 | 2.90 | 66 |
| 339a) | 11.09 | 0.65 | 2.36 | 31.0 | 800 | 5.66 | 0.92 | 2.94 | 75 |
| 626 | 6.85 | 0.64 | 2.88 | 59.8 | 1000 | 4.64 | 0.99 | 3.03 | 93 |
| 839 | 5.46 | 0.92 | 2.95 | 78.7 | 1200 | 3.82 | 1.36 | 2.95 | 113 |
| 947 | 4.94 | 0.91 | 3.02b) | 89.6 | 1500 | 3.00 | 1.79 | 2.90 | 132 |
| 999 | 4.64 | 0.98 | 3.03 | 95.6 | 2000 | 2.23 | 2.15 | 2.75 | 149 |
| 1055 | 4.42 | 1.15 | 3.02 | 98.6 | | | | | |
| 1106 | 4.22 | 1.26 | 2.99 | 104.0 | | | | | |
| 1162 | 3.97 | 1.30 | 2.96 | 85.7u | | | | | |
| 1270 | 3.58 | 1.52 | 2.95c) | 119.0 | | | | | |
| 1603 | 2.82 | 1.82 | 2.88d) | 135.5 | | | | | |
| 2196 | 2.03 | 2.50 | 2.68 | 154.3 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 2.99 and 3.06 µg at/L.
c) Mean value of 2.91 and 2.99 µg at/L.
d) Mean value of 2.84 and 2.91 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 10, 1952; 0451 GCT; 5°50'N, 106°50'W; sounding, 2080 fm; wind, 110°, force 2; weather, partly cloudy; sea, rough; wire angle, 06°. 55

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 28.45 | 4.53 | | 0 | 28.45 | 4.53 | |
| 9 | 28.46 | 4.56 | | 10 | 28.46 | 4.57 | |
| 24 | 28.47 | 4.61 | | 20 | 28.47 | 4.60 | |
| 51 | 25.80 | 4.20 | | 30 | 28.46 | 4.60 | |
| 74 | 18.06 | 1.87 | | 50 | 25.82 | 4.40 | |
| 102 | 14.03 | 1.39 | | 75 | 18.00 | 1.86 | |
| 153 | 11.49 | 1.10 | | 100 | 14.32 | 1.43 | |
| 204 | 10.69 | 1.87 | | 150 | 11.65 | 1.10 | |
| 260 | 10.32 | 0.95 | | 200 | 10.73 | 1.01 | |
| 307 | 9.93 | 0.88 | | 250 | 10.38 | 0.96 | |
| 414 | 8.90 | 0.52 | | 300 | 10.00 | 0.88 | |
| 517 | 7.91 | 0.25 | | 400 | 9.04 | 0.58 | |
| 621 | 6.97 | 0.39 | | 500 | 8.07 | 0.27 | |
| 823 | 5.48 | 0.62 | | 600 | 7.15 | 0.36 | |
| 1025 | 4.56 | 1.05 | | 700 | 6.32 | 0.46 | |
| 1219 | 3.79 | 1.29 | | 800 | 5.61 | 0.57 | |
| | | | | 1000 | 4.67 | 0.99 | |
| | | | | 1200 | 3.85 | 1.28 | |

HORIZON; June 10, 1952; 1113, 1227 GCT; 6°41'N, 106°31.5'W; sounding, 2050 fm; wind, missing; weather, missing; sea, missing; wire angle, 06°, 10°. 56

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.56 | 4.55 | 0.32 | 0.2 | 0 | 28.56 | 4.55 | 0.32 | 0.2 |
| 10 | 28.58 | 4.57 | 0.30 | 0 | 10 | 28.58 | 4.57 | 0.30 | 0 |
| 29 | 28.66 | 4.55 | 0.30 | 0 | 20 | 28.64 | 4.55 | 0.30 | 0 |
| 43 | 27.42 | 4.73 | 0.41 | 0.5 | 30 | 28.64 | 4.56 | 0.30 | 0.1 |
| 66 | 17.82 | 1.24 | 1.89 | 15.1 | 50 | 24.95 | 4.67 | 1.02 | 8.4 |
| 90 | 13.87 | 0.34 | 2.33 | 24.1 | 75 | 16.15 | 1.20 | 2.20 | 20 |
| 114 | 12.54 | 0.50 | 2.31 | 27.5 | 100 | 13.02 | 0.38 | 2.33 | 26 |
| 171 | 11.44 | 0.91 | 2.23 | 28.1 | 150 | 11.80 | 0.81 | 2.25 | 28 |
| 228 | 10.79 | 0.91 | 2.29 | 30.4 | 200 | 11.05 | 0.91 | 2.25 | 29 |
| 285 | 10.26 | 0.96 | - | 35.1 | 250 | 10.56 | 0.94 | 2.32 | 32 |
| 341 | 9.80 | 0.69 | 2.28 | 36.5 | 300 | 10.14 | 0.90 | 2.32 | 36 |
| 449 | 8.74 | 0.13 | 2.78 | 48.8 | 400 | 9.24 | 0.34 | 2.47 | 43 |
| 562 | 7.44 | 0.11 | 2.98 | 63.7 | 500 | 8.15 | 0.13 | 2.95 | 50 |
| 668 | 6.30 | 0.21 | 2.98 | 73.8 | 600 | 6.99 | 0.19 | 3.03 | 67 |
| | | | | | 700 | 6.04 | 0.25 | 3.01 | 77 |
| 511a) | 8.02 | 0.13 | 2.92b) | 51.3 | 800 | 5.40 | 0.53 | 3.13 | 86 |
| 611 | 6.86 | 0.21 | 3.04 | 68.2 | 1000 | 4.37 | 1.01 | 3.08 | 102 |
| 815 | 5.31 | 0.54 | 3.14 | 87.5 | 1200 | 3.67 | 1.25 | 3.11 | 118 |
| 920 | 4.70 | 0.69 | 3.09c) | 95.9 | 1500 | 2.75 | 1.57 | 3.04 | 134 |
| 972 | 4.48 | 0.93 | 3.09 | 101.0 | 2000 | 2.16 | 2.42 | 2.82 | 149 |
| 1024 | 4.26 | 1.07 | 3.08 | 103.7 | 2500 | 1.88 | 2.60 | 2.80 | 159 |
| 1076 | 4.06 | 1.10 | 3.05 | 108.7 | | | | | |
| 1127 | 3.88 | 1.18 | 3.10 | 112.5 | | | | | |
| 1231 | 3.58 | 1.28 | 3.11 | 120.4 | | | | | |
| 1547 | 2.77 | 1.86 | 3.02 | 136.4 | | | | | |
| 2074 | 2.12 | 2.48 | 2.80 | 149.8 | | | | | |
| 2624 | 1.82 | 2.60 | 2.80 | 161.1 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 2.88 and 2.97 µg at/L.
c) Alternate value, 3.16 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 57 | HORIZON; June 10, 1952; 1847 GCT; 7°25'N, 105°55'W; sounding, 2000+ fm; wind, 120°, force 3; weather, partly cloudy; sea, rough; wire angle, 23°. | | | | | | | | |
| 0 | 28.58 | 4.55 | | | 0 | 28.58 | 4.55 | | |
| 10 | 28.48 | 4.56 | | | 10 | 28.48 | 4.56 | | |
| 27 | 28.50 | 4.53 | | | 20 | 28.49 | 4.55 | | |
| 54 | 23.27 | 2.86 | | | 30 | 28.49 | 4.51 | | |
| 79 | 15.64 | 0.93 | | | 50 | 24.20 | 3.84 | | |
| 105 | 12.68 | 0.64 | | | 75 | 16.90 | 1.01 | | |
| 157 | 11.98 | 0.37 | | | 100 | 12.80 | 0.68 | | |
| 207 | 11.30 | 0.30 | | | 150 | 12.08 | 0.40 | | |
| 258 | 10.69 | 0.42 | | | 200 | 11.37 | 0.30 | | |
| 310 | 10.08 | 0.61 | | | 250 | 10.78 | 0.42 | | |
| 411 | 9.10 | 0.27 | | | 300 | 10.16 | 0.59 | | |
| 516 | 7.76 | 0.07 | | | 400 | 9.22 | 0.32 | | |
| 619 | 6.63 | 0.09 | | | 500 | 7.96 | 0.09 | | |
| 829 | 5.11 | 0.52 | | | 600 | 6.83 | 0.08 | | |
| 1034 | 4.24 | 0.78 | | | 700 | 5.96 | 0.27 | | |
| 1233 | 3.50 | 1.14 | | | 800 | 5.28 | 0.48 | | |
| | | | | | 1000 | 4.39 | 0.74 | | |
| | | | | | 1200 | 3.62 | 1.10 | | |
| 58 | HORIZON; June 11, 1952; 0539, 0703 GCT; 8°13'N, 105°27'W; sounding, 1650 fm; wind, missing; weather, missing; sea, missing; wire angle, 08°, 10°. | | | | | | | | |
| 0 | 28.43 | 4.52 | 0.36 | 0.4 | 0 | 28.43 | 4.52 | 0.36 | 0.4 |
| 10 | 28.44 | 4.55 | 0.39 | 0.2 | 10 | 28.44 | 4.55 | 0.39 | 0.2 |
| 30 | 28.50 | 4.56 | 0.40 | 0.5 | 20 | 28.47 | 4.56 | 0.40 | 0.3 |
| 45 | 26.97 | 4.41 | 0.58 | 1.8 | 30 | 28.50 | 4.56 | 0.40 | 0.5 |
| 69 | 19.58 | 1.47 | 1.98 | 13.1 | 50 | 25.90 | 3.80 | 0.78 | 4.0 |
| 93 | 14.45 | 0.79 | 2.32 | 14.8 | 75 | 18.30 | 1.24 | 2.07 | 15 |
| 117 | 13.16 | 0.47 | 2.47 | 22.1 | 100 | 13.94 | 0.67 | 2.39 | 20 |
| 174 | 11.46 | 0.55 | 2.49 | 25.4 | 150 | 11.97 | 0.49 | 2.48 | 24 |
| 229 | 10.82 | 0.56 | 2.51 | 29.3 | 200 | 11.14 | 0.56 | 2.50 | 27 |
| 287 | 10.20 | 0.40 | 2.57 | 32.2 | 250 | 10.58 | 0.50 | 2.53 | 30 |
| 343 | 9.62 | 0.35 | 2.75 | 35.6 | 300 | 10.05 | 0.38 | 2.61 | |
| 451 | 8.30 | 0.14 | 2.91 | 37.6 | 400 | 8.94 | 0.24 | 2.87 | |
| 563 | 6.96 | 0.14 | 3.04 | 53.3 | 500 | 7.66 | 0.17 | | |
| 673 | 6.14 | 0.25 | 3.10 | 75.1 | 600 | 6.63 | 0.12 | | |
| | | | | | 700 | 5.95 | 0.27 | | 78 |
| 506a) | 7.38 | 0.18 | 3.10b) | 62.6 | 800 | 5.16 | 0.39 | | 88 |
| 605 | 6.57 | 0.12 | 3.32 | 70.0 | 1000 | 4.36 | | | 102 |
| 807 | 5.12 | 0.40 | 3.44 | 88.6 | 1200 | 3.73 | | | 115 |
| 909 | 4.76 | 0.62 | 3.46 | 94.0 | 1500 | 2.98 | | 2.95 | 132 |
| 960 | 4.52 | 0.79 | 3.34 | 97.2 | 2000 | 2.14 | | 2.85 | 154 |
| 1011 | 4.32 | 1.60 | 3.21 | 102.8 | 2500 | 1.83 | | 2.74 | 162 |
| 1064 | 4.15 | 1.17 | 3.24 | 107.3 | | | | | |
| 1117 | 3.98 | 1.07 | 3.28 | 110.2 | | | | | |
| 1220 | 3.66 | 0.90 | 3.10 | 116.5 | | | | | |
| 1533 | 2.94 | 0.90 | 2.94 | 134.3 | | | | | |
| 2056 | 2.06 | 2.25 | 2.84 | 156.1 | | | | | |
| 2602 | 1.80 | 2.55 | 2.71 | 163.1 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 3.18 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 11, 1952; 1400 GCT; 9°05'N, 104°54'W; sounding, 1650 fm; wind, 180°, force 3; weather, partly cloudy; sea, moderate; wire angle, 08°. 59

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 28.50 | 4.51 | | 0 | 28.50 | 4.51 | |
| 10 | 28.50 | 4.56 | | 10 | 28.52 | 4.56 | |
| 24 | 28.52 | 4.56 | | 20 | 28.52 | 4.56 | |
| 53 | 24.88 | 3.49 | | 30 | 28.51 | 4.53 | |
| 76 | 18.42 | 1.03 | | 50 | 26.05 | 3.99 | |
| 104 | 13.68 | 0.11 | | 75 | 18.43 | 1.04 | |
| 155 | 12.31 | 0.26 | | 100 | 14.05 | 0.18 | |
| 204 | 11.57 | 0.38 | | 150 | 12.42 | 0.24 | |
| 259 | 10.86 | 0.42 | | 200 | 11.51 | 0.37 | |
| 305 | 10.20 | 0.18 | | 250 | 10.96 | 0.44 | |
| 410 | 8.66 | 0.08 | | 300 | 10.26 | 0.23 | |
| 512 | 7.30 | 0.07 | | 400 | 8.81 | 0.08 | |
| 617 | 6.38 | 0.15 | | 500 | 7.45 | 0.07 | |
| 819 | 5.18 | 0.34 | | 600 | 6.50 | 0.14 | |
| 1022 | 4.34 | 0.76 | | 700 | 5.84 | 0.22 | |
| 1219 | 3.64 | 1.15 | | 800 | 5.27 | 0.33 | |
| | | | | 1000 | 4.43 | 0.71 | |
| | | | | 1200 | 3.71 | 1.12 | |

HORIZON; June 11, 1952; 2055, 2222 GCT; 9°53'N, 104°28.5'W; sounding, 1300 fm; wind, missing; weather, missing; sea, missing; wire angle, 10°, 09°. 60

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.74 | 4.55 | 0.36 | 0.4 | 0 | 28.74 | 4.55 | 0.36 | 0.4 |
| 10 | 28.68 | 4.53 | 0.41 | 0.4 | 10 | 28.68 | 4.53 | 0.41 | 0.4 |
| 25 | 28.60 | 4.50 | 0.42 | 0 | 20 | 28.63 | 4.50 | 0.42 | 0 |
| 39 | 28.34 | 4.60 | 0.70 | 0 | 30 | 28.54 | 4.53 | 0.44 | 0 |
| 58 | 24.86 | 3.57 | 1.08 | 4.9 | 50 | 26.75 | 4.32 | 0.92 | 1.5 |
| 77 | 19.16 | 0.94 | 2.18 | 13.5 | 75 | 19.50 | 0.27 | 2.14 | 13 |
| 96 | 14.96 | 0.12 | 2.60 | 23.6 | 100 | 14.63 | 0.12 | 2.60 | 24 |
| 146 | 12.56 | 0.20 | 2.46 | 26.5 | 150 | 12.49 | 0.22 | 2.46 | 27 |
| 191 | 11.82 | 0.36 | 2.46 | 28.8 | 200 | 11.73 | 0.38 | 2.48 | 29 |
| 237 | 11.34 | 0.50 | 2.51 | 30.1 | 250 | 11.22 | 0.50 | 2.52 | 30 |
| 284 | 10.92 | 0.42 | 2.53 | 31.3 | 300 | 10.71 | 0.35 | 2.54 | 33 |
| 380 | 9.58 | 0.11 | 2.80 | 43.4 | 400 | 9.26 | 0.11 | | 46 |
| 475 | 8.19 | 0.11 | 2.97 | 57.1 | 500 | 7.79 | 0.10 | | 61 |
| 575 | 6.78 | 0.09 | 3.07 | 78.5 | 600 | 6.55 | 0.10 | | 75 |
| | | | | | 700 | 5.83 | 0.26 | | 81 |
| 477a) | 8.20 | 0.12 | - | 57.4 | 800 | 5.14 | 0.43 | | 89 |
| 574 | 6.76 | 0.11 | - | 72.0 | 1000 | 4.30 | 0.93 | 3.54 | 103 |
| 673 | 6.02 | 0.19 | 2.45b) | 79.4 | 1200 | 3.79 | 1.08 | 3.54 | 116 |
| 766 | 5.38 | 0.45 | 3.52 | 84.1 | 1500 | 2.96 | 1.44 | 3.43 | 140 |
| 814 | 5.08 | 0.43 | 3.49c) | 91.1 | | | | | |
| 865 | 4.89 | 0.54 | 3.46 | 94.0 | | | | | |
| 913 | 4.66 | 0.66 | 3.48 | 98.6 | | | | | |
| 960 | 4.44 | 0.89 | 3.52 | 101.3 | | | | | |
| 1154 | 3.88 | 1.05 | 3.54 | 112.1 | | | | | |
| 1443 | 3.09 | 1.37 | 3.45 | 137.0 | | | | | |
| 1939 | 2.14 | 2.12 | 3.29 | 154.8 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 3.56 µg at/L.
c) Alternate value, 3.37 µg at/L, not used in interpolation.

61

HORIZON; June 12, 1952; 0641 GCT; 10°45'N, 103°47'W; sounding, 1650 fm; wind, 220°, force 4; weather, partly cloudy; sea, rough; wire angle, 23°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 28.41 | 4.55 | | | 0 | 28.41 | 4.55 | | |
| 9 | 28.42 | 4.56 | | | 10 | 28.43 | 4.56 | | |
| 23 | 28.45 | 4.57 | | | 20 | 28.44 | 4.57 | | |
| 51 | 25.96 | 4.03 | | | 30 | 28.44 | 4.50 | | |
| 72 | 18.72 | 0.55 | | | 50 | 26.60 | 4.13 | | |
| 98 | 13.82 | 0.10 | | | 75 | 17.74 | 0.47 | | |
| 146 | 12.51 | 0.21 | | | 100 | 13.73 | 0.10 | | |
| 193 | 11.90 | 0.21 | | | 150 | 12.45 | 0.21 | | |
| 245 | 11.14 | 0.25 | | | 200 | 11.77 | 0.22 | | |
| 290 | 10.74 | 0.16 | | | 250 | 11.07 | 0.24 | | |
| 391 | 9.37 | 0.08 | | | 300 | 10.61 | 0.14 | | |
| 488 | 7.92 | 0.08 | | | 400 | 9.24 | 0.08 | | |
| 587 | 6.86 | 0.14 | | | 500 | 7.76 | 0.09 | | |
| 785 | 5.44 | 0.32 | | | 600 | 6.75 | 0.14 | | |
| 984 | 4.64 | 0.59 | | | 700 | 6.01 | 0.24 | | |
| 1182 | 3.82 | 0.92 | | | 800 | 5.36 | 0.34 | | |
| | | | | | 1000 | 4.57 | 0.62 | | |
| | | | | | 1200 | (3.76) | | | |

62

HORIZON; June 12, 1952; 1330, 1451 GCT; 11°40'N, 103°24'W; sounding, 1650 fm; wind, missing; weather, missing; sea, missing; wire angle, 27°, 42°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.96 | 4.56 | 0.46 | 0.5 | 0 | 27.96 | 4.56 | 0.46 | 0.5 |
| 9 | 27.99 | 4.51 | 0.40 | 0.7 | 10 | 27.99 | 4.51 | 0.40 | 0.8 |
| 26 | 28.04 | 4.50 | 0.54 | 0.9 | 20 | 28.03 | 4.50 | 0.53 | 0.9 |
| 39 | 28.02 | 4.51 | 0.45 | 0.7 | 30 | 28.04 | 4.50 | 0.55 | 0.8 |
| 60 | 25.99 | 4.13 | 0.72 | 1.4 | 50 | 27.75 | 4.45 | 0.51 | 0.8 |
| 81 | 19.56 | 0.88 | 2.24 | 12.8 | 75 | 21.80 | 0.75 | 1.94 | 9 |
| 102 | 14.92 | 0.07 | 2.67 | 23.6 | 100 | 15.50 | 0.07 | 2.66 | 23 |
| 152 | 12.58 | 0.11 | 2.62 | 27.7 | 150 | 12.52 | 0.11 | 2.62 | 28 |
| 202 | 11.80 | 0.15 | 2.68 | 29.3 | 200 | 11.83 | 0.14 | 2.68 | 29 |
| 252 | 11.10 | 0.20 | 2.65 | 32.6 | 250 | 11.13 | 0.20 | 2.65 | 33 |
| 303 | 10.54 | 0.15 | 2.80 | 35.1 | 300 | 10.57 | 0.16 | 2.79 | 35 |
| 401 | 9.30 | 0.08 | 2.95 | 47.3 | 400 | 9.31 | 0.09 | 2.95 | 47 |
| 504 | 7.96 | 0.08 | 3.10a) | 61.7 | 500 | 8.02 | 0.08 | 3.14 | 61 |
| 615 | 6.81 | 0.07 | 3.24 | 70.0 | 600 | 6.95 | 0.07 | 3.23 | 69 |
| | | | | | 700 | 6.06 | 0.13 | 3.38 | 79 |
| 402b) | 9.24 | 0.09 | 3.02 | 47.3 | 800 | 5.50 | 0.20 | 3.39 | 87 |
| 480 | 8.23 | 0.09 | 3.16c) | 57.6 | 1000 | 4.46 | 0.30 | 3.46 | 106 |
| 648 | 6.46 | 0.11 | 3.33 | 75.8 | 1200 | 3.69 | 0.67 | 3.54 | 122 |
| 740 | 5.88 | 0.14 | 3.41 | 80.5 | 1500 | 2.96 | 1.26 | 3.40 | 139 |
| 787 | 5.56 | 0.20 | 3.38 | 85.7 | 2000 | 2.04 | 2.06 | 2.97 | 158 |
| 835 | 5.32 | 0.21 | 3.44 | 89.6 | | | | | |
| 885 | 5.14 | 0.22 | 3.49 | 93.4 | | | | | |
| 933 | 4.88 | 0.19 | 3.53d) | 98.3 | | | | | |
| 1030 | 4.34 | 0.36 | 3.44e) | 108.5 | | | | | |
| 1326 | 3.33 | 0.91 | 3.62f) | 130.1 | | | | | |
| 1819 | 2.30 | 1.82 | 3.04 | 154.3 | | | | | |
| 2336 | 1.84 | 2.43 | 2.87g) | 162.4 | | | | | |

a) Mean value of 3.05 and 3.14 µg at/L.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Alternate value, 3.30 µg at/L, not used in interpolation.
d) Alternate value, 3.60 µg at/L, not used in interpolation.
e) Alternate value, 3.36 µg at/L, not used in interpolation.
f) Alternate value, 3.72 µg at/L, not used in interpolation.
g) Alternate value, 3.04 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 12, 1952; 2210, 2248 GCT; 12°20'N, 102°38'W; sounding, 1730 fm; wind, 270°, force 4; weather, cloudy; sea, very rough; wire angle, 10°, 15°. 63

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 28.36 | 4.56 | | 0 | 28.36 | 4.56 | |
| 10 | 28.37 | 4.53 | | 10 | 28.37 | 4.53 | |
| 29 | 28.34 | 4.53 | | 20 | 28.38 | 4.53 | |
| 58 | 27.38 | 4.57 | | 30 | 28.38 | 4.53 | |
| 86 | 19.66 | 0.99 | | 50 | 28.34 | 4.56 | |
| 114 | 14.85 | 0.10 | | 75 | 26.10 | 1.97 | |
| 171 | 12.59 | 0.10 | | 100 | 16.60 | 0.25 | |
| 227 | 11.68 | 0.08 | | 150 | 13.50 | 0.10 | |
| 281 | 10.86 | 0.11 | | 200 | 12.10 | 0.10 | |
| 337 | 10.18 | 0.08 | | 250 | 11.30 | 0.09 | |
| 442 | 8.58 | 0.06 | | 300 | 10.63 | 0.11 | |
| 550 | 7.10 | 0.08 | | 400 | 9.23 | 0.06 | |
| 656 | 6.08 | 0.08 | | 500 | 7.76 | 0.07 | |
| 874 | 4.82 | 0.28 | | 600 | 6.55 | 0.08 | |
| | | | | 700 | 5.77 | 0.10 | |
| 1090 | 4.01 | 0.49 | | 800 | 5.20 | 0.18 | |
| 1297 | 3.34 | 0.94 | | 1000 | 4.34 | 0.40 | |
| | | | | 1200 | 3.63 | 0.67 | |

HORIZON; June 13, 1952; 0523, 0700 GCT; 13°11'N, 102°07'W; sounding, 1730 fm; wind, direction missing, force 4; weather, missing; sea, missing; wire angle, 27°, 28°. 64

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.34 | 4.53 | 0.54 | 0 | 0 | 28.34 | 4.53 | 0.54 | 0 |
| 9 | 28.34 | 4.64 | 0.45 | 0 | 10 | 28.35 | 4.64 | 0.45 | 0 |
| 26 | 28.36 | 4.58 | 0.60 | 0 | 20 | 28.36 | 4.59 | 0.58 | 0 |
| 39 | 27.82 | 4.72 | 0.51 | 0 | 30 | 28.36 | 4.63 | 0.59 | 0 |
| 60 | 26.09 | 4.85 | 0.76 | 0 | 50 | 26.90 | 4.82 | 0.62 | 0 |
| 81 | 25.07 | 4.57 | 0.64 | 0 | 75 | 25.30 | 4.71 | 0.63 | 0 |
| 102 | 18.76 | 1.30 | 2.06 | 12.1 | 100 | 21.00 | 1.53 | 1.96 | 11 |
| 152 | 13.07 | 0.08 | 2.68 | 26.6 | 150 | 13.12 | 0.09 | 2.68 | 27 |
| 203 | 12.06 | 0.11 | 2.66 | 29.2 | 200 | 12.11 | 0.10 | 2.66 | 29 |
| 252 | 11.26 | 0.11 | 2.76 | 32.9 | 250 | 11.26 | 0.11 | 2.75 | 33 |
| 304 | 10.60 | 0.09 | 2.86 | 37.1 | 300 | 10.65 | 0.10 | 2.85 | 37 |
| 402 | 9.44 | 0.06 | 2.98a) | 46.3 | 400 | 9.47 | 0.06 | 2.94 | 48 |
| 506 | 7.62 | 0.07 | 3.08 | 62.6 | 500 | 7.71 | 0.07 | 3.07 | 62 |
| 608 | 6.68 | 0.08 | 3.12 | 72.7 | 600 | 6.71 | 0.10 | 3.22 | 72 |
| | | | | | 700 | 5.97 | 0.10 | 3.32 | 82 |
| 309b) | 10.62 | 0.15 | 2.79 | 37.4 | 800 | 5.20 | 0.16 | 3.37 | 91 |
| 571 | 6.98 | 0.13 | 3.20 | 68.9 | 1000 | 4.29 | 0.46 | 3.34 | 108 |
| 767 | 5.44 | 0.12 | 3.35 | 88.0 | 1200 | 3.65 | 0.76 | 3.26 | 124 |
| 868 | 4.88 | 0.23 | 3.38 | 96.3 | 1500 | 2.87 | 1.28 | 3.11 | 138 |
| 915 | 4.71 | 0.28 | 3.34 | 100.1 | 2000 | 2.04 | 1.84 | 2.86 | 154 |
| 968 | 4.42 | 0.39 | 3.35 | 105.7 | 2500 | 1.82 | 2.29 | 2.70 | 160 |
| 1015 | 4.25 | 0.48 | 3.34 | 108.7 | | | | | |
| 1066 | 4.08 | 0.49 | 3.40 | 111.4 | | | | | |
| 1167 | 3.72 | 0.69 | 3.28 | 120.8 | | | | | |
| 1482 | 2.90 | 1.26 | 3.16c) | 137.0 | | | | | |
| 2068 | 1.94 | 3.86 | 2.82 | 156.1 | | | | | |
| 2664 | 1.81 | 2.49 | 2.66 | 161.1 | | | | | |

a) Mean value of 2.94 and 3.03 µg at/L.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Mean value of 3.12 and 3.19 µg at/L.

65

HORIZON; June 13, 1952; 1409 GCT; 14°00'N, 101°34'W; sounding, 1930 fm; wind, 310°, force 5; weather, cloudy; sea, high; wire angle, 35°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 28.28 | 4.50 | | | 0 | 28.28 | 4.50 | | |
| 7 | 28.30 | 4.52 | | | 10 | 28.30 | 4.54 | | |
| 22 | 28.28 | 4.63 | | | 20 | 28.29 | 4.62 | | |
| 44 | 26.18 | 4.63 | | | 30 | 28.07 | 4.63 | | |
| 69 | 22.68 | 3.21 | | | 50 | 25.66 | 4.55 | | |
| 92 | 18.42 | 1.22 | | | 75 | 20.30 | 2.60 | | |
| 137 | 13.60 | 0.11 | | | 100 | 17.20 | 0.86 | | |
| 182 | 12.30 | 0.10 | | | 150 | 13.17 | 0.10 | | |
| 227 | 11.60 | 0.10 | | | 200 | 11.97 | 0.10 | | |
| 273 | 11.12 | 0.08 | | | 250 | 11.34 | 0.09 | | |
| 348 | 10.12 | 0.07 | | | 300 | 10.82 | 0.08 | | |
| 431 | 8.80 | 0.07 | | | 400 | 9.30 | 0.07 | | |
| 515 | 7.73 | 0.06 | | | 500 | 7.90 | 0.06 | | |
| 694 | 6.04 | 0.08 | | | 600 | 6.84 | 0.07 | | |
| 878 | 4.97 | 0.26 | | | 700 | 6.01 | 0.09 | | |
| 1067 | 4.12 | 0.41 | | | 800 | 5.36 | 0.18 | | |
| | | | | | 1000 | 4.37 | 0.36 | | |

66

HORIZON; June 13-14, 1952; 2346, 0120 GCT; 14°53'N, 101°03'W; sounding, 2000 fm; wind, 320°, force 5; weather, rain; sea, very rough; wire angle, 35°, 27°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.48 | 4.53 | 0.61 | 0.4 | 0 | 28.48 | 4.53 | 0.61 | 0.4 |
| 8 | 28.50 | 4.54 | 0.64 | 0.5 | 10 | 28.53 | 4.54 | 0.64 | 0.4 |
| 24 | 28.55 | 4.53 | 0.70 | 0.2 | 20 | 28.54 | 4.53 | 0.68 | 0.2 |
| 36 | 27.24 | 4.61 | - | 0.5 | 30 | 28.54 | 4.55 | 0.73 | 0.3 |
| 54 | 24.26 | 4.82 | - | 1.3 | 50 | 25.24 | 4.80 | 0.90 | 2.1 |
| 71 | 19.57 | 1.78 | 2.14 | 10.1 | 75 | 19.10 | 1.32 | 2.38 | 12.2 |
| 88 | 17.44 | 0.63 | 2.62 | 16.0 | 100 | 15.97 | 0.40 | 2.74 | 20 |
| 128 | 13.66 | 0.17 | 2.89 | 25.7 | 150 | 12.88 | 0.14 | 2.98 | 28 |
| 167 | 12.48 | 0.14 | - | 29.0 | 200 | 11.92 | 0.08 | 3.03 | 31 |
| 207 | 11.83 | 0.07 | 2.99a) | 31.3 | 250 | 11.19 | 0.11 | 3.00 | 33 |
| 247 | 11.24 | 0.11 | 3.00 | 32.9 | 300 | 10.38 | 0.11 | 3.05 | 36 |
| 325 | 9.98 | 0.10 | 3.09 | 39.2 | 400 | 8.90 | 0.08 | 3.19 | 50 |
| 413 | 8.70 | 0.07 | 3.20 | 52.4 | 500 | 7.62 | 0.07 | 3.25 | 64 |
| 514 | 7.42 | 0.09 | 3.38 | 66.1 | 600 | 6.74 | 0.13 | 3.27 | 73 |
| | | | | | 700 | 6.00 | 0.13 | 3.29 | 82 |
| 303b) | 10.04 | 0.11 | 2.90 | 40.5 | 800 | 5.33 | 0.13 | 3.37 | 91 |
| 572 | 6.95 | 0.13 | 3.26 | 70.6 | 1000 | 4.42 | 0.37 | 3.41 | 106 |
| 768 | 5.52 | 0.13 | 3.34 | 88.2 | 1200 | 3.65 | 0.63 | 3.29 | 122 |
| 868 | 4.96 | 0.18 | 3.42 | 96.3 | 1500 | 3.01 | 1.21 | 3.18 | 136.1 |
| 916 | 4.75 | 0.24 | 3.38 | 100.4 | 2000 | 2.20 | 2.10 | 2.94 | 154 |
| 969 | 4.56 | 0.32 | 3.41 | 104.4 | 2500 | 1.86 | 2.54 | 2.78 | 162 |
| 1017 | 4.31 | 0.41 | 3.42c) | 106.2 | | | | | |
| 1072 | 4.10 | 0.50 | 3.46 | 112.1 | | | | | |
| 1173 | 3.74 | 0.58 | 3.32 | 120.1 | | | | | |
| 1500 | 3.01 | 1.21 | 3.18 | 136.1 | | | | | |
| 2106 | 2.02 | 2.21 | 2.90 | 157.3 | | | | | |
| 2713 | 1.84 | 2.66 | 2.72d) | 163 | | | | | |

a) Mean value of 2.95 and 3.03 µg at/L.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Mean value of 3.36 and 3.47 µg at/L.
d) Mean value of 2.68 and 2.75 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 14, 1952; 0930 GCT; 15°46'N, 100°35'W; sounding, 1850 fm; wind, 110°, force 5; weather, rain; sea, high; wire angle, 40°. 67

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.09 | 4.59 | | | 0 | 28.09 | 4.59 | | |
| 8 | 28.10 | 4.61 | | | 10 | 28.10 | 4.62 | | |
| 24 | 27.98 | 4.69 | | | 20 | 28.05 | 4.69 | | |
| 44 | 23.26 | 2.31 | | | 30 | 27.45 | 4.45 | | |
| 65 | 18.02 | 0.20 | | | 50 | 20.70 | 1.30 | | |
| 87 | 15.04 | 0.11 | | | 75 | 16.05 | 0.13 | | |
| 127 | 13.02 | 0.09 | | | 100 | 14.07 | 0.11 | | |
| 166 | 12.24 | 0.10 | | | 150 | 12.56 | 0.10 | | |
| 205 | 11.20 | 0.15 | | | 200 | 11.31 | 0.14 | | |
| 247 | 10.22 | 0.11 | | | 250 | 10.13 | 0.11 | | |
| 328 | 8.96 | 0.12 | | | 300 | 9.27 | 0.12 | | |
| 413 | 7.98 | 0.08 | | | 400 | 8.13 | 0.08 | | |
| 492 | 7.05 | 0.06 | | | 500 | 6.98 | 0.06 | | |
| 662 | 5.93 | 0.09 | | | 600 | 6.31 | 0.07 | | |
| 842 | 4.96 | 0.15 | | | 700 | 5.73 | 0.10 | | |
| 1029 | 4.16 | 0.41 | | | 800 | 5.16 | 0.13 | | |
| | | | | | 1000 | 4.26 | 0.36 | | |

HORIZON; June 18, 1952; 0845, 0546 GCT; 15°32.5'N, 99°50.5'W; sounding, 2000 fm; wind, 040°, force 3; weather, cloudy; sea, moderate; wire angle, 29°, 28°. 68

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.58 | 4.51 | 0.67 | 0.4 | 0 | 27.58 | 4.51 | 0.67 | 0.4 |
| 8 | 27.59 | 4.60 | 0.64 | 0 | 10 | 27.58 | 4.63 | 0.65 | 0.0 |
| 22 | 26.00 | 4.82 | 0.72 | 0.2 | 20 | 26.55 | 4.81 | 0.70 | 0.1 |
| 39 | 21.56 | - | - | - | 30 | 23.70 | 4.64 | 1.16 | 2.2 |
| 55 | 17.66 | 1.29 | 2.62 | 16.0 | 50 | 18.90 | 2.35 | 2.42 | 13.3 |
| 70 | 15.52 | 0.17 | 2.77 | 22.1 | 75 | 15.00 | 0.14 | 2.82 | 23 |
| 90 | 14.02 | 0.13 | 2.88 | 24.5 | 100 | 13.60 | 0.15 | 2.89 | 23 |
| 133 | 12.68 | 0.25 | 2.88 | 28.4 | 150 | 12.46 | 0.19 | 2.86 | 22 |
| 176 | 12.12 | 0.13 | 2.84 | 29.3 | 200 | 11.64 | 0.13 | 3.90 | 32 |
| 225 | 11.29 | 0.17 | 3.00a) | 34.2 | 250 | 11.09 | 0.16 | 3.06 | 35 |
| 268 | 10.96 | 0.16 | 3.08 | 36.0 | 300 | 10.56 | 0.10 | 3.12 | 40 |
| 367 | 9.46 | 0.13 | 3.20 | 48.1 | 400 | 8.89 | 0.13 | 3.25 | 52 |
| 466 | 7.94 | 0.12 | 3.40b) | 61.4 | 500 | 7.60 | 0.12 | 3.48 | 65 |
| 575 | 6.95 | 0.11 | 3.46 | 64.8 | 600 | 6.75 | 0.12 | 3.61 | 74 |
| | | | | | 700 | 6.03 | 0.11 | 3.66 | 83 |
| 307c) | 10.28 | 0.09 | 3.25 | 41.4 | 800 | 5.51 | 0.11 | 3.68 | 90 |
| 586 | 6.92 | 0.14 | 3.60 | 72.0 | 1000 | 4.63 | 0.17 | 3.78 | 105 |
| 786 | 5.58 | 0.11 | 3.68 | 88.7 | 1200 | 3.96 | 0.45 | 3.78 | 118 |
| 886 | 5.20 | 0.13 | 3.70 | 96.3 | 1500 | 3.26 | 0.17 | 3.64 | 135 |
| 933 | 4.92 | 0.15 | 3.76 | 100.1 | 2000 | 2.28 | 1.87 | 3.29 | 156 |
| 986 | 4.68 | 0.16 | 3.78 | 103.5 | 2500 | 1.89 | 2.38 | 3.14 | 162 |
| 1034 | 4.54 | 0.25 | 3.78 | 106.4 | | | | | |
| 1085 | 4.40 | 0.30 | 3.76 | 110.3 | | | | | |
| 1185 | 4.00 | 0.45 | 3.78 | 117.0 | | | | | |
| 1505 | 3.26 | 0.17 | 3.64 | - | | | | | |
| 2096 | 2.10 | 2.17 | 3.24 | 158.2 | | | | | |
| 2701 | 1.86 | 2.40 | 3.12 | 161.5 | | | | | |

a) Alternate value, 2.92 µg at/L, not used in interpolation.
b) Alternate value, 3.33 µg at/L, not used in interpolation.
c) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

69 HORIZON; June 18, 1952; 1544 GCT; 14°29'N, 99°33'W; sounding, 1950 fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 34°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.91 | 4.47 | | | 0 | 27.91 | 4.47 | | |
| 8 | 27.94 | 4.48 | | | 10 | 27.95 | 4.48 | | |
| 20 | 27.96 | 4.50 | | | 20 | 27.96 | 4.50 | | |
| 43 | 23.72 | 4.54 | | | 30 | 27.95 | 4.54 | | |
| 62 | 19.15 | 0.83 | | | 50 | 21.15 | 3.50 | | |
| 84 | 15.80 | 0.13 | | | 75 | 16.60 | 0.32 | | |
| 125 | 13.05 | 0.09 | | | 100 | 14.02 | 0.10 | | |
| 165 | 12.38 | 0.11 | | | 150 | 12.60 | 0.10 | | |
| 210 | 11.84 | 0.09 | | | 200 | 11.95 | 0.10 | | |
| 245 | 11.48 | 0.09 | | | 250 | 11.44 | 0.09 | | |
| 329 | 10.34 | 0.13 | | | 300 | 10.79 | 0.12 | | |
| 412 | 8.94 | 0.11 | | | 400 | 9.16 | 0.11 | | |
| 497 | 7.72 | 0.10 | | | 500 | 7.70 | 0.10 | | |
| 669 | 6.16 | 0.13 | | | 600 | 6.64 | 0.11 | | |
| 856 | 5.13 | 0.14 | | | 700 | 5.97 | 0.13 | | |
| 1046 | 4.38 | 0.28 | | | 800 | 5.43 | 0.13 | | |
| | | | | | 1000 | 4.55 | 0.23 | | |

70 HORIZON; June 19, 1952; 0018, 0145 GCT; 13°34.5'N, 99°22'W; sounding, 1600 fm; wind, 360°, force 4; weather, drizzle; sea, rough; wire angle, 14°, 19°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.73 | 4.48 | 0.49a) | 0 | 0 | 27.73 | 4.48 | 0.49 | 0 |
| 10 | 27.74 | 4.56 | 0.52 | 0 | 10 | 27.74 | 4.56 | 0.52 | 0 |
| 24 | 27.78 | 4.52 | 0.57 | 0 | 20 | 27.77 | 4.53 | 0.55 | 0 |
| 43 | 25.06 | 4.60 | 0.78 | 0 | 30 | 27.77 | 4.54 | 0.60 | 0 |
| 61 | 19.78 | 0.98 | 2.33 | 11.3 | 50 | 23.00 | 4.29 | 1.72 | 1.0 |
| 79 | 16.08 | 0.14 | 2.74 | 20.7 | 75 | 16.25 | 0.22 | 2.68 | 20.0 |
| 100 | 14.46 | 0.11 | 2.80 | 23.6 | 100 | 14.46 | 0.11 | 2.80 | 23.6 |
| 148 | 12.50 | 0.14 | 2.83 | 24.5 | 150 | 12.47 | 0.14 | 2.83 | 25 |
| 197 | 11.93 | 0.16 | 2.82 | 29.5 | 200 | 11.89 | 0.16 | 2.82 | 30 |
| 253 | 11.24 | 0.08 | 2.87 | 33.3 | 250 | 11.28 | 0.09 | 2.87 | 33 |
| 297 | 10.60 | 0.11 | 2.90 | 36.7 | 300 | 10.52 | 0.11 | 2.90 | 37 |
| 401 | 8.82 | 0.18 | 3.02 | 51.8 | 400 | 8.85 | 0.18 | 3.02 | 52 |
| 506 | 7.46 | 0.12 | 3.21 | 64.4 | 500 | 7.51 | 0.15 | 3.20 | 63 |
| 613 | 6.60 | 0.15 | 3.35 | 73.8 | 600 | 6.70 | 0.14 | 3.34 | 73 |
| | | | | | 700 | 5.94 | 0.16 | 3.47 | 82 |
| 493b) | 7.52 | 0.13 | 3.29 | 65.2 | 800 | 5.26 | 0.17 | 3.58 | 91 |
| 591 | 6.73 | 0.13 | 3.43 | 72.2 | 1000 | 4.34 | 0.33 | 3.59 | 109 |
| 790 | 5.32 | 0.16 | 3.58 | 89.8 | 1200 | 3.64 | 0.73 | 3.48 | 123 |
| 894 | 4.78 | 0.24 | 3.60c) | 99.5 | 1500 | 2.96 | 1.29 | 3.38 | 137 |
| 945 | 4.55 | 0.29 | 3.60 | 104.0 | 2000 | 2.16 | 2.06 | 3.12 | 155 |
| 998 | 4.35 | 0.32 | 3.59d) | 108.2 | 2500 | 1.86 | 2.44 | 3.02 | 162 |
| 1051 | 4.12 | 0.47 | 3.58 | 113.0 | | | | | |
| 1103 | 3.95 | 0.55 | 3.50e) | 116.6 | | | | | |
| 1207 | 3.60 | 0.73 | 3.48 | 123.8 | | | | | |
| 1526 | 2.94 | 1.31 | 3.36 | 137.5 | | | | | |
| 2053 | 2.08 | 2.12 | 3.10 | 157.0 | | | | | |
| 2599 | 1.84 | 2.49 | 3.01 | 162.7 | | | | | |

a) Alternate value, 0.59 µg at/L, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Mean value of 3.56 and 3.65 µg at/L.
d) Alternate value, 3.71 µg at/L, not used in interpolation.
e) Alternate value, 3.43 µg at/L, not used in interpolation.

HORIZON; June 19, 1952; 0918 GCT; 12°32'N, 99°06'W; sounding, 1930 fm; wind, 180°, force 3; weather, clear; sea, rough; wire angle, 16°. 71

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 28.24 | 4.40 | | | 0 | 28.24 | 4.40 | | |
| 9 | 28.26 | 4.48 | | | 10 | 28.26 | 4.48 | | |
| 21 | 28.26 | 4.47 | | | 20 | 28.26 | 4.47 | | |
| 50 | 25.99 | 4.48 | | | 30 | 28.25 | 4.48 | | |
| 73 | 18.76 | 0.55 | | | 50 | 25.99 | 4.48 | | |
| 100 | 14.44 | 0.27 | | | 75 | 18.55 | 0.46 | | |
| 150 | 12.48 | 0.13 | | | 100 | 14.44 | 0.27 | | |
| 199 | 11.74 | 0.10 | | | 150 | 12.48 | 0.13 | | |
| 255 | 11.00 | 0.13 | | | 200 | 11.71 | 0.10 | | |
| 300 | 10.30 | 0.16 | | | 250 | 11.05 | 0.12 | | |
| 406 | 8.36 | 0.14 | | | 300 | 10.30 | 0.16 | | |
| 507 | 7.16 | 0.13 | | | 400 | 8.45 | 0.14 | | |
| 608 | 6.32 | 0.10 | | | 500 | 7.22 | 0.13 | | |
| 806 | 5.18 | 0.19 | | | 600 | 6.39 | 0.10 | | |
| 1007 | 4.38 | 0.48 | | | 700 | 5.69 | 0.12 | | |
| 1199 | 3.74 | 0.66 | | | 800 | 5.20 | 0.19 | | |
| | | | | | 1000 | 4.41 | 0.47 | | |
| | | | | | 1200 | (3.74) | (0.66) | | |

HORIZON; June 19, 1952; 1936, 1737 GCT; 11°38'N, 99°05'W; sounding, 1940 fm; wind, 090°, force 3; weather, cloudy; sea, moderate; wire angle, 16°, 15°. 72

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.34 | 4.49 | 0.64 | 1.3 | 0 | 28.34 | 4.49 | 0.64 | 1.3 |
| 9 | 28.06 | 4.54 | 0.60 | 0 | 10 | 28.06 | 4.54 | 0.60 | 0 |
| 23 | 28.06 | 4.54 | 0.62 | 0 | 20 | 28.06 | 4.54 | 0.62 | 0 |
| 36 | 28.12 | 4.60 | 0.64 | 0 | 30 | 28.08 | 4.57 | 0.63 | 0 |
| 55 | 26.66 | 4.64 | 0.78 | 2.7 | 50 | 27.75 | 4.64 | 0.71 | 1.3 |
| 72 | 20.36 | 1.34 | 2.26 | 9.9 | 75 | 19.00 | 0.95 | 2.32 | 11.5 |
| 90 | 15.36 | 0.26 | 2.78 | 20.3 | 100 | 14.28 | 0.26 | 2.81 | 22 |
| 139 | 12.66 | 0.33 | 2.82 | 25.4 | 150 | 12.47 | 0.34 | 2.82 | 25 |
| 183 | 11.92 | 0.36 | 2.81 | 22.3 | 200 | 11.65 | 0.26 | 2.84 | 25 |
| 225 | 11.30 | 0.13 | 2.90 | 31.3 | 250 | 11.01 | 0.24 | 2.94 | 31 |
| 266 | 10.82 | 0.30 | 2.94 | 30.4 | 300 | 10.37 | 0.26 | 2.95 | 33 |
| 355 | 9.64 | 0.13 | 3.00 | 40.5 | 400 | 9.02 | 0.10 | 3.17 | 48 |
| 442 | 8.48 | 0.09 | 3.34 | 54.7 | 500 | 7.85 | 0.08 | 3.26 | 61 |
| 535 | 7.54 | 0.10 | 3.44 | 60.7 | 600 | 6.93 | 0.14 | 3.46 | 67.7 |
| | | | | | 700 | 6.07 | 0.16 | 3.51 | 78 |
| 504a) | 7.77 | 0.08 | 3.36 | 61.0 | 800 | 5.37 | 0.17 | 3.57 | 88 |
| 600 | 6.93 | 0.14 | 3.46 | 67.7 | 1000 | 4.40 | 0.36 | 3.67 | 106 |
| 795 | 5.42 | 0.17 | 3.56 | 87.3 | 1200 | 3.65 | 0.74 | 3.56 | 121 |
| 893 | 4.83 | 0.21 | 3.62 | 97.4 | 1500 | 2.93 | 1.24 | 3.48 | 137 |
| 943 | 4.59 | 0.25 | 3.66 | 101.9 | 2000 | 2.20 | 2.04 | 3.11 | 152 |
| 992 | 4.42 | 0.35 | 3.67 | 104.8 | 2500 | 1.84 | 2.44 | 2.97 | 159 |
| 1043 | 4.19 | 0.39 | 3.68 | 110.3 | | | | | |
| 1095 | 3.96 | 0.63 | 3.60 | 114.1 | | | | | |
| 1198 | 3.66 | 0.73 | 3.56 | 120.8 | | | | | |
| 1514 | 2.92 | 1.27 | 3.47 | 137.5 | | | | | |
| 2048 | 2.16 | 2.10 | 3.09 | 152.8 | | | | | |
| 2582 | 1.83 | 2.48 | 2.95 | 160.2 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 73 | HORIZON; June 20, 1952; 0232 GCT; 10°30.5'N, 98°51'W; sounding, 2100 fm; wind, 120°, force 1; weather, partly cloudy; sea, moderate; wire angle, 16°. | | | | | | | | |
| 0 | 28.52 | 4.43 | | | 0 | 28.52 | 4.43 | | |
| 9 | 28.18 | 4.46 | | | 10 | 28.18 | 4.46 | | |
| 23 | 28.22 | 4.47 | | | 20 | 28.21 | 4.47 | | |
| 49 | 22.68 | 2.57 | | | 30 | 28.2 | 4.42 | | |
| 72 | 16.42 | 0.25 | | | 50 | 22.30 | 2.25 | | |
| 98 | 13.32 | 0.11 | | | 75 | 15.45 | 0.20 | | |
| 146 | 12.18 | 0.09 | | | 100 | 13.22 | 0.11 | | |
| 194 | 11.58 | 0.08 | | | 150 | 12.14 | 0.09 | | |
| 245 | 11.00 | 0.09 | | | 200 | 11.50 | 0.08 | | |
| 286 | 10.42 | 0.08 | | | 250 | 10.92 | 0.09 | | |
| 383 | 9.02 | 0.08 | | | 300 | 10.21 | 0.08 | | |
| 475 | 7.75 | 0.10 | | | 400 | 8.76 | 0.09 | | |
| 567 | 6.73 | 0.11 | | | 500 | 7.43 | 0.11 | | |
| 758 | 5.53 | 0.11 | | | 600 | 6.49 | 0.11 | | |
| 954 | 4.56 | 0.44 | | | 700 | 5.87 | 0.11 | | |
| 1150 | 3.80 | 0.86 | | | 800 | 5.33 | 0.16 | | |
| | | | | | 1000 | 4.35 | 0.54 | | |
| 74 | HORIZON; June 20, 1952; 0856, 1030 GCT; 9°31.5'N, 98°41'W; sounding, 2200 fm; wind, 180°, force 1; weather, rain; sea, slight; wire angle, 11°, 12°. | | | | | | | | |
| 0 | 28.31 | 4.47 | 0.53 | 0 | 0 | 28.31 | 4.47 | 0.53 | 0 |
| 10 | 28.14 | 4.48 | 0.54 | 0 | 10 | 28.14 | 4.48 | 0.54 | 0 |
| 25 | 28.16 | 4.52 | 0.58 | 0 | 20 | 28.15 | 4.52 | 0.56 | 0 |
| 44 | 26.12 | 4.40 | 0.75 | 0 | 30 | 28.16 | 4.52 | 0.61 | 0 |
| 63 | 18.19 | 0.47 | 2.57 | 14.2 | 50 | 24.05 | 3.70 | 0.85 | 1.3 |
| 82 | 14.56 | 0.37 | 2.70 | 20.7 | 75 | 15.65 | 0.43 | 2.69 | 19 |
| 105 | 13.22 | 0.23 | 2.71 | 23.4 | 100 | 13.46 | 0.24 | 2.71 | 23 |
| 156 | 12.19 | 0.73 | 2.61 | 25.6 | 150 | 12.25 | 0.70 | 2.62 | 26 |
| 205 | 11.52 | 0.73 | 2.72 | 27.2 | 200 | 11.57 | 0.73 | 2.70 | 27 |
| 258 | 10.82 | 0.18 | 2.91 | 32.8 | 250 | 10.93 | 0.23 | 2.89 | 32 |
| 302 | 10.22 | 0.10 | 3.00 | 38.0 | 300 | 10.25 | 0.11 | 2.99 | 38 |
| 406 | 8.73 | 0.10 | 3.20 | 51.8 | 400 | 8.83 | 0.10 | 3.19 | 51 |
| 507 | 7.32 | 0.09 | 3.32 | 64.8 | 500 | 7.40 | 0.11 | 3.32 | 63 |
| 610 | 6.44 | 0.07 | 3.35 | 73.1 | 600 | 6.53 | 0.10 | 3.41 | 73 |
| | | | | | 700 | 5.80 | 0.16 | 3.49 | 83 |
| 501a) | 7.66 | 0.13 | 3.42 | 62.3 | 800 | 5.14 | 0.28 | 3.53 | 92 |
| 602 | 6.52 | 0.13 | 3.50 | 73.1 | 1000 | 4.28 | 0.64 | 3.52 | 107 |
| 801 | 5.12 | 0.28 | 3.53 | 91.8 | 1200 | 3.60 | 1.06 | 3.48 | 119 |
| 900 | 4.69 | 0.45 | 3.54 | 98.6 | 1500 | 2.94 | 1.40 | 3.22 | 133 |
| 950 | 4.51 | 0.47 | 3.54 | 101.9 | 2000 | 2.21 | 2.21 | 3.20 | 153 |
| 999 | 4.28 | 0.63 | 3.52 | 105.7 | 2500 | 1.81 | 2.59 | 3.09 | 157 |
| 1050 | 4.10 | 0.78 | 3.54 | 110.0 | | | | | |
| 1099 | 3.94 | 0.77 | 3.54 | 113.4 | | | | | |
| 1200 | 3.60 | 1.06 | 3.48 | 118.8 | | | | | |
| 1508 | 2.92 | 1.41 | 3.42 | 132.8 | | | | | |
| 2013 | 2.14 | 2.14 | 3.19 | 153.9 | | | | | |
| 2580 | 1.81 | 2.63 | 3.07 | 157.0 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 20, 1952; 1635 GCT; 8°43.5'N, 98°33'W; sounding, 2110 fm; wind, 170°, force 1; weather, cloudy; sea, rough; wire angle, 15°. 75

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 28.34 | 4.46 | | 0 | 28.34 | 4.46 | |
| 10 | 28.44 | 4.49 | | 10 | 28.44 | 4.49 | |
| 24 | 28.48 | 4.49 | | 20 | 28.46 | 4.52 | |
| 51 | 23.88 | 3.16 | | 30 | 28.48 | 4.47 | |
| 74 | 16.46 | 0.19 | | 50 | 24.15 | 3.45 | |
| 102 | 13.77 | 0.21 | | 75 | 16.20 | 0.19 | |
| 151 | 12.36 | 0.27 | | 100 | 13.86 | 0.11 | |
| 202 | 11.70 | 0.27 | | 150 | 12.40 | 0.27 | |
| 255 | 11.03 | 0.62 | | 200 | 11.73 | 0.27 | |
| 301 | 10.51 | 0.63 | | 250 | 11.09 | 0.61 | |
| 400 | 9.09 | 0.16 | | 300 | 9.80 | 0.63 | |
| 496 | 7.72 | 0.09 | | 400 | 9.09 | 0.16 | |
| 594 | 6.68 | 0.11 | | 500 | 7.66 | 0.09 | |
| 791 | 5.38 | 0.40 | | 600 | 6.63 | 0.12 | |
| 995 | 4.44 | 0.67 | | 700 | 5.94 | 0.24 | |
| 1187 | 3.79 | 1.08 | | 800 | 5.33 | 0.43 | |
| | | | | 1000 | 4.43 | 0.69 | |
| | | | | 1200 | (3.74) | (1.12) | |

HORIZON; June 21, 1952; 0013, 0145 GCT; 7°46'N, 98°19'W; sounding, 1950 fm; wind, 200°, force 4; weather, cloudy; sea, very rough; wire angle, 40°, 20°. 76

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.84 | 4.55 | 0.62a) | 0 | 0 | 27.84 | 4.55 | 0.62 | 0 |
| 8 | 27.86 | 4.57 | 0.60 | 0 | 10 | 27.86 | 4.58 | 0.60 | 0 |
| 20 | 27.88 | 4.61 | 0.60 | 0 | 20 | 27.88 | 4.61 | 0.60 | 0 |
| 35 | 27.90 | 4.60 | 0.64 | 0 | 30 | 27.89 | 4.61 | 0.62 | 0 |
| 49 | 22.84 | 3.31 | 1.42 | 3.1 | 50 | 22.45 | 3.20 | 1.40 | 4 |
| 63 | 17.82 | 1.58 | 2.16 | 13.0 | 75 | 14.20 | 1.31 | 2.34 | 19 |
| 78 | 13.88 | 1.27 | 2.35 | 20.2 | 100 | 13.31 | 1.20 | 2.38 | 21 |
| 115 | 13.06 | 1.20 | 2.39 | 21.2 | 150 | 12.63 | 1.14 | 2.46 | 23 |
| 155 | 12.57 | 1.11 | 2.47 | 22.9 | 200 | 12.02 | 0.81 | 2.56 | 25 |
| 198 | 12.06 | 0.81 | 2.56 | 24.8 | 250 | 11.44 | 0.94 | 2.57 | 27 |
| 233 | 11.65 | 0.95 | 2.57 | 26.3 | 300 | 10.80 | 0.85 | 2.59 | 29 |
| 314 | 10.61 | 0.81 | 2.62 | 30.4 | 400 | 9.32 | 0.55 | 3.01 | 42 |
| 404 | 9.28 | 0.21 | 3.02 | 42.5 | 500 | 7.85 | 0.09 | 3.24 | 57 |
| 508 | 7.74 | 0.09 | 3.26 | 57.8 | 600 | 6.76 | | 3.36 | 67 |
| | | | | | 700 | 5.98 | | 3.39 | 75 |
| 332b) | 10.34 | 0.79 | 2.81 | 34.2 | 800 | 5.36 | | 3.41 | 83 |
| 610 | 6.69 | 0.65u | 3.37 | 67.3 | 1000 | 4.39 | | 3.44 | 102 |
| 820 | 5.26 | 0.70u | 3.42 | 85.3 | 1200 | 3.72 | 1.16 | 3.37 | 116 |
| 926 | 4.77 | 0.16 | 3.47 | 92.5 | 1500 | 2.97 | 1.40 | 3.40 | 122 |
| 977 | 4.49 | 0.40 | 3.46 | 100.4 | 2000 | 2.26 | 2.06 | 3.19 | 141 |
| 1032 | 4.26 | 0.79 | 3.42 | 103.9 | 2500 | 1.91 | 2.47 | 2.91 | 158 |
| 1082 | 4.10 | 0.91 | 3.41 | 100.1 | | | | | |
| 1137 | 3.92 | 1.04 | 3.36 | 111.2 | | | | | |
| 1243 | 3.60 | 1.30 | 3.38 | 119.2 | | | | | |
| 1573 | 2.84 | 1.41 | 3.40 | 121.5 | | | | | |
| 2159 | 2.08 | 2.28 | 3.02 | 150.5 | | | | | |
| 2747 | 1.82 | 2.57 | 2.88 | 160.2 | | | | | |

a) Alternate value, 0.49 µg at/L, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.

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HORIZON; June 21, 1952; 1144, 1310 GCT; 6°50'N, 98°07'W; sounding, 1990 fm; wind, 250°, force 3; weather, rain; sea, very rough; wire angle, 32°, 40°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 27.86 | 4.54 | | | 0 | 27.86 | 4.54 | | |
| 8 | 27.88 | 4.52 | | | 10 | 27.89 | 4.52 | | |
| 21 | 27.91 | 4.55 | | | 20 | 27.90 | 4.55 | | |
| 47 | 26.60 | 4.55 | | | 30 | 27.91 | 4.55 | | |
| 66 | 19.38 | 1.28 | | | 50 | 25.50 | 4.51 | | |
| 90 | 15.13 | 0.86 | | | 75 | 17.70 | 0.95 | | |
| 135 | 12.29 | 0.95 | | | 100 | 13.75 | 0.87 | | |
| 174 | 11.74 | 0.81 | | | 150 | 12.04 | 0.95 | | |
| 221 | 11.12 | 0.69u | | | 200 | 11.43 | 0.67 | | |
| 255 | 10.68 | 0.78 | | | 250 | 10.75 | 0.75 | | |
| 338 | 9.76 | 0.29 | | | 300 | 10.20 | 0.54 | | |
| 418 | 8.72 | 0.21 | | | 400 | 8.98 | 0.21 | | |
| 502 | 7.59 | 0.17 | | | 500 | 7.63 | 0.17 | | |
| 661 | 6.32 | 0.28 | | | 600 | 6.78 | 0.23 | | |
| | | | | | 700 | 6.07 | 0.35 | | |
| 869 | 4.94 | 0.71 | | | 800 | 5.40 | 0.54 | | |
| 904 | 4.19 | 1.04 | | | | | | | |

78

HORIZON; June 21-22, 1952; 2228, 2248, 0012 GCT; 5°46'N, 97°52'W; sounding, 1890 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 38°, 43°, 33°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.77 | 4.55 | 0.43 | 0 | 0 | 27.77 | 4.55 | 0.43 | 0 |
| 8 | 27.82 | 4.58 | 0.48 | 0 | 10 | 27.82 | 4.59 | 0.49 | 0 |
| 23 | 27.76 | 4.63 | 0.52 | 0 | 20 | 27.78 | 4.62 | 0.52 | 0 |
| 36 | 27.02 | 4.60 | 0.48 | 0 | 30 | 27.76 | 4.63 | 0.50 | 0 |
| 54 | 24.16 | 3.99 | 1.14 | 2.9 | 50 | 24.80 | 4.30 | 0.64 | 2.2 |
| | | | | | 75 | 20.25 | 2.87 | 1.53 | 8 |
| 67 | 22.04 | 3.21 | 1.42 | 5.9 | 100 | 14.35 | 2.16 | 1.80 | 15 |
| 83 | 18.46 | 2.59 | 1.61 | 9.5 | 150 | 12.50 | 1.76 | 2.28 | 23 |
| 123 | 13.08 | 1.84 | 2.07 | 22.1 | 200 | 11.55 | 1.84 | 2.26 | 25 |
| 160 | 12.30 | 1.76 | 2.32 | 22.7 | 250 | 11.02 | 1.29 | 2.45 | 28 |
| 192 | 11.64 | 1.90 | 2.25 | 23.9 | 300 | 10.45 | 1.13 | 2.53 | 31 |
| 222 | 11.34 | 1.39 | 2.40 | 26.6 | 400 | 9.25 | 0.56 | 2.84 | 39 |
| 284 | 10.64 | 1.19 | 2.50 | 29.5 | 500 | 8.03 | 0.30 | 3.17 | 51 |
| 358 | 9.79 | 0.81 | 2.62 | 34.2 | 600 | 6.93 | 0.31 | 3.17 | 61 |
| 450 | 8.62 | 0.29 | 3.22a) | 45.2 | 700 | 6.09 | 0.37 | 3.20 | 69 |
| | | | | | 800 | 5.33 | 0.61 | 3.28 | 82 |
| 288b) | 10.39 | 1.18 | 2.51 | 30.2 | 1000 | 4.33 | 1.20 | 3.23 | 99 |
| 536 | 7.61 | 0.30 | 3.16 | 54.7 | 1200 | 3.67 | 1.53 | 3.20 | 113 |
| 710 | 6.03 | 0.37 | 3.21 | 69.7 | 1500 | 3.01 | 1.83 | 3.07 | 126 |
| 795 | 5.37 | 0.59 | 3.27 | 80.5 | 2000 | 2.36 | | 2.91 | 148 |
| 837 | 5.09 | 0.70 | 3.30 | 86.2 | | | | | |
| 881 | 4.82 | 0.78 | 3.28 | 89.6 | | | | | |
| 922 | 4.65 | 0.89 | 3.26 | 93.1 | | | | | |
| 967 | 4.46 | 1.13 | 3.22 | 96.3 | | | | | |
| 1050 | 4.16 | 1.29 | 3.26 | 103.5 | | | | | |
| 1316 | 3.38 | 1.65 | 3.14 | 117.0 | | | | | |
| 1819 | 2.54 | 2.01 | 3.03c) | 142.4 | | | | | |
| 2400 | 1.92 | 1.00u | 2.82d) | 154.6 | | | | | |

a) Mean value of 3.17 and 3.28 µg at/L.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Mean value of 2.96 and 3.03 µg at/L.
d) Mean value of 2.79 and 2.86 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 22, 1952; 1005 GCT; 4°44'N, 97°31'W; sounding, 1950 fm; wind, 180°, force 4; weather, partly cloudy; sea, very rough; wire angle, 46°. 79

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.50 | 4.71 | | | 0 | 25.50 | 4.71 | | |
| 6 | 25.50 | 4.69 | | | 10 | 25.51 | 4.69 | | |
| 21 | 25.52 | 4.70 | | | 20 | 25.52 | 4.70 | | |
| 39 | 24.48 | 4.64 | | | 30 | 25.52 | 4.66 | | |
| 58 | 24.39 | 4.64 | | | 50 | 24.43 | 4.64 | | |
| 76 | 22.50 | 4.51 | | | 75 | 22.53 | 4.52 | | |
| 112 | 16.63 | 2.44 | | | 100 | 18.70 | 3.55 | | |
| 144 | 14.04 | 1.67 | | | 150 | 13.90 | 1.56 | | |
| 176 | 13.26 | 1.21 | | | 200 | 12.99 | 1.16 | | |
| 208 | 12.92 | 1.15 | | | 250 | 12.54 | 0.98 | | |
| 272 | 12.26 | 0.91 | | | 300 | 11.75 | 1.03 | | |
| 332 | 11.10 | 1.27 | | | 400 | 10.02 | 1.45 | | |
| 397 | 10.07 | 1.45 | | | 500 | 8.50 | 1.18 | | |
| 539 | 7.92 | 1.05 | | | 600 | 7.08 | 0.97 | | |
| 698 | 6.02 | 0.93 | | | 700 | 6.01 | 0.93 | | |
| 893 | 4.92 | 1.33 | | | 800 | 5.40 | 1.10 | | |

HORIZON; June 22-23, 1952; 2313, 0044 GCT; 3°47.5'N, 97°34'W; sounding, 1870 fm; wind, 160°, force 3; weather, partly cloudy; sea, rough; wire angle, 18°, 14°. 80

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.08 | 4.64 | 0.68 | 0.7 | 0 | 26.08 | 4.64 | 0.68 | 0.7 |
| 9 | 25.96 | 4.71 | 0.66 | 1.1 | 10 | 25.96 | 4.71 | 0.66 | 1.0 |
| 22 | 25.90 | 4.70 | 0.72 | 0.4 | 20 | 25.92 | 4.70 | 0.71 | 0.5 |
| 41 | 25.40 | 4.66 | 0.80 | 0.5 | 30 | 25.78 | 4.69 | 0.76 | 0.4 |
| 59 | 24.15 | 4.45 | 1.02 | 1.1 | 50 | 24.68 | 4.56 | 0.87 | 0.9 |
| 77 | 22.72 | 4.37 | 1.16 | 2.2 | 75 | 22.75 | 4.38 | 1.14 | 2.1 |
| 99 | 17.72 | 2.63 | 1.70 | 4.3 | 100 | 17.25 | 2.60 | 1.71 | 4.5 |
| 149 | 13.77 | 1.68 | 2.08 | 18.9 | 150 | 13.75 | 1.84 | 2.08 | 19 |
| 199 | 13.16 | 1.49 | 2.16a) | 19.4 | 200 | 13.14 | 1.49 | 2.24 | 19 |
| 253 | 12.60 | 0.97 | 2.42 | 23.8 | 250 | 12.54 | 0.99 | 2.42 | 24 |
| 298 | 11.87 | 0.83 | 2.47b) | 26.8 | 300 | 11.84 | 0.84 | 2.48 | 27 |
| 404 | 10.31 | 1.18 | 2.48 | 31.1 | 400 | 10.37 | 1.16 | 2.48 | 31 |
| 507 | 7.98 | 0.15 | 3.03 | 54.7 | 500 | 8.13 | 0.17 | 2.99 | 54 |
| 614 | 6.52 | 0.62 | 3.13c) | 63.4 | 600 | 6.66 | 0.58 | 3.13 | 63 |
| | | | | | 700 | 5.88 | 1.01 | 3.12 | 67 |
| 343d) | 11.42 | 0.84 | 2.48 | 27.5 | 800 | 5.33 | 1.38 | 3.08 | 75 |
| 636 | 6.34 | 0.73 | 3.13 | 63.2 | 1000 | 4.56 | 1.46 | 3.12 | 92 |
| 849 | 5.08 | 1.51 | 3.07 | 78.5 | 1200 | 4.06 | 1.58 | 3.13 | 102 |
| 956 | 4.74 | 1.33 | 3.13 | 89.3 | 1500 | 3.19 | 1.75 | (2.99) | 117 |
| 1007 | 4.53 | 1.47 | 3.12 | 92.5 | 2000 | 2.31 | 2.29 | (2.90) | 144 |
| 1062 | 4.36 | 1.49 | 3.11 | 96.1 | 2500 | 1.88 | 2.77 | (2.78) | 154 |
| 1114 | 4.25 | 1.59 | 3.13 | 99.0 | | | | | |
| 1169 | 4.15 | 1.57 | 3.16 | 101.5 | | | | | |
| 1277 | 3.81 | 1.61 | 2.99 | 102.2 | | | | | |
| 1613 | 2.95 | 1.84 | - | 126.7 | | | | | |
| 2216 | 2.04 | 2.52 | - | 149.4 | | | | | |
| 2826 | 1.79 | 2.80 | 2.70 | 157.7 | | | | | |

a) Mean value of 2.09 and 2.24 µg at/L.
b) Alternate value, 2.39 µg at/L, not used in interpolation.
c) Alternate value, 3.20 µg at/L, not used in interpolation.
d) Overlapping casts; reconciliation of property curves when necessary.

81 HORIZON; June 23, 1952; 0934, 1022 GCT; 2°42'N, 97°27.5'W; sounding, 1720 fm; wind, 180°, force 4; weather, cloudy; sea, rough; wire angle, 28°, 50°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 25.83 | 4.67 | | | 0 | 25.83 | 4.67 | | |
| 8 | 25.82 | 4.66 | | | 10 | 25.83 | 4.66 | | |
| 24 | 25.84 | 4.66 | | | 20 | 25.84 | 4.66 | | |
| 45 | 23.99 | - | | | 30 | 25.84 | 4.49 | | |
| 66 | 18.15 | 2.16 | | | 50 | 22.90 | 2.38 | | |
| 88 | 15.12 | 2.24 | | | 75 | 16.05 | 2.17 | | |
| 132 | 14.20 | 2.16 | | | 100 | 14.81 | 2.23 | | |
| 176 | 13.94 | 2.23 | | | 150 | 13.88 | 2.01 | | |
| | | | | | 200 | 13.14 | 1.19 | | |
| 184 | 13.74 | 2.16 | | | 250 | 12.47 | 1.11 | | |
| 221 | 12.83 | 0.99 | | | 300 | 11.78 | 1.38 | | |
| 291 | 11.94 | 1.41 | | | 400 | 9.45 | 0.40 | | |
| 367 | 10.40 | 0.60 | | | 500 | 7.96 | 0.29 | | |
| 436 | 8.76 | 0.27 | | | 600 | 6.86 | 0.78 | | |
| 590 | 6.97 | 0.71 | | | 700 | 5.98 | 1.10 | | |
| 745 | 5.70 | 1.57 | | | 800 | 5.45 | 1.36 | | |
| 928 | 4.92 | 1.54 | | | 1000 | (4.70) | | | |

82 HORIZON; June 23, 1952; 1755, 2002 GCT; 1°53'N, 97°19.5'W; sounding, 1580 fm; wind, 180°, force 4; weather, cloudy; sea, moderate; wire angle, 43°, 10°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.92 | 4.64 | 0.81 | 0.4 | 0 | 25.92 | 4.64 | 0.81 | 0.4 |
| 7 | 26.02 | 4.69 | 0.76 | 0.7 | 10 | 26.02 | 4.68 | 0.76 | 0.6 |
| 22 | 25.98 | 4.65 | 0.77 | 0.0 | 20 | 25.99 | 4.65 | 0.77 | 0.2 |
| 33 | 25.68 | 4.68 | 0.85 | 0.0 | 30 | 25.98 | 4.66 | 0.83 | 0 |
| 49 | 20.01 | 2.74 | 1.68 | 7.7 | 50 | 19.50 | 2.40 | 1.74 | 7.8 |
| 63 | 16.00 | 1.95 | 1.98 | 14.4 | 75 | 15.03 | 2.24 | 1.98 | 15 |
| 80 | 14.80 | 2.28 | 1.98 | 15.1 | 100 | 14.31 | 2.27 | 1.94 | 16 |
| 116 | 14.18 | 2.23 | 1.90 | 16.0 | 150 | 13.94 | 2.10 | 1.95 | 16 |
| 152 | 13.93 | 2.10 | 1.96 | 16.2 | 200 | 13.35 | 2.11 | 2.13 | 18 |
| 187 | 13.58 | 2.11 | 2.14 | 17.1 | 250 | 12.54 | 1.92 | 2.20 | 21 |
| 220 | 13.01 | 2.11 | 2.10 | 19.1 | 300 | 11.59 | 1.24 | 2.46 | 26 |
| 291 | 11.76 | 1.36 | 2.41 | 24.7 | 400 | 9.00 | 0.51 | 2.88 | 42 |
| 383 | 9.34 | 0.50 | 2.85 | 39.6 | 500 | 7.43 | 0.65 | 3.01 | 51 |
| 490 | 7.52 | 0.82 | 2.96a) | 50.0 | 600 | 6.67 | 1.05 | 3.08 | 57 |
| | | | | | 700 | 6.13 | 1.19 | 3.08 | 64 |
| 493 | 7.54 | 0.72 | 3.03b) | 51.1 | 800 | 5.56 | 1.29 | 3.09 | 72 |
| 591 | 6.73 | 1.03 | 3.07 | 56.0 | 1000 | 4.62 | 1.46 | 3.21 | 89 |
| 790 | 5.62 | 1.28 | 3.08 | 71.3 | 1200 | (3.77) | (1.68) | (3.18) | (110) |
| 889 | 5.13 | 1.50 | 3.18 | 78.7 | | | | | |
| 941 | 4.91 | 1.63 | 3.19 | 80.5 | | | | | |
| 991 | 4.66 | 1.48 | 3.21 | 87.3 | | | | | |
| 1043 | 4.44 | 1.44 | 3.24 | 96.3 | | | | | |
| 1094 | 4.26 | 1.48 | 3.20 | 99.2 | | | | | |
| 1199 | 3.78 | 1.68 | 3.18 | 110.0 | | | | | |

a) Mean value of 2.93 and 3.00 µg at/L.
b) Mean value of 2.99 and 3.07 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 24, 1952; 0724 GCT; 0°53'N, 97°11.5'W; sounding, 1840 fm; wind, 140°, force 3; weather, partly cloudy; sea, moderate; wire angle, 33°. 83

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.62 | 4.58 | | | 0 | 24.62 | 4.58 | | |
| 8 | 22.48 | - | | | 10 | 24.62 | 4.54 | | |
| 22 | 22.76 | 4.43 | | | 20 | 23.40 | 4.47 | | |
| 44 | 19.10 | 3.44 | | | 30 | 21.50 | 4.36 | | |
| 66 | 15.36 | 2.43 | | | 50 | 18.00 | 3.00 | | |
| 88 | 13.92 | 2.30 | | | 75 | 14.55 | 2.33 | | |
| 131 | 12.98 | 2.20 | | | 100 | 13.42 | 2.25 | | |
| 178 | 12.84 | 2.16 | | | 150 | 12.91 | 2.17 | | |
| 222 | 12.72 | 1.99 | | | 200 | 12.78 | 2.10 | | |
| 271 | 12.30 | 1.43 | | | 250 | 12.50 | 1.70 | | |
| 363 | 10.28 | 0.60 | | | 300 | 11.83 | 1.11 | | |
| 459 | 8.45 | 0.58 | | | 400 | 9.50 | 0.58 | | |
| 550 | 7.32 | 0.89 | | | 500 | 7.85 | 0.70 | | |
| 749 | 5.92 | 1.18 | | | 600 | 6.93 | 0.95 | | |
| 948 | 4.88 | 1.63 | | | 700 | 6.24 | 1.08 | | |
| 1137 | 4.00 | 1.78 | | | 800 | 5.65 | 1.29 | | |
| | | | | | 1000 | 4.64 | 1.69 | | |

HORIZON; June 24, 1952; 1528, 1702 GCT; 0°06'S, 96°52'W; sounding, 1780 fm; wind, 140°, force 3; weather, clear; sea, moderate; wire angle, 10°, 10°. 84

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.56 | 4.35 | 1.26 | 5.4 | 0 | 21.56 | 4.35 | 1.26 | 5.4 |
| 10 | 21.42 | 4.41 | 1.26 | 5.2 | 10 | 21.42 | 4.41 | 1.26 | 5.2 |
| 30 | 20.70 | 4.12 | 1.31 | 5.8 | 20 | 21.17 | 4.35 | 1.28 | 5.5 |
| 45 | 19.54 | 3.68 | 1.42 | 7.6 | 30 | 20.70 | 4.12 | 1.31 | 5.8 |
| 69 | 15.75 | 3.20 | 1.69 | 10.3 | 50 | 18.90 | 3.60 | 1.48 | 8 |
| 92 | 14.80 | 2.70 | 1.89 | 12.8 | 75 | 15.44 | 3.01 | 1.75 | 11 |
| 115 | 14.06 | 2.74 | 1.96 | 13.9 | 100 | 14.56 | 2.71 | 1.92 | 13 |
| 170 | 13.32 | 2.55 | 2.03 | 16.0 | 150 | 13.49 | 2.62 | 2.00 | 15 |
| 226 | 13.01 | 2.26 | 2.13 | 14.9 | 200 | 13.15 | 2.44 | 2.07 | 80 |
| 282 | 12.42 | 1.07 | 2.52 | 22.7 | 250 | 12.82 | 1.81 | 2.24 | 81 |
| 339 | 11.21 | 0.43 | 2.77 | 30.8 | 300 | 12.12 | 0.81 | 2.64 | 27 |
| 447 | 8.94 | 0.46 | 3.00 | 43.0 | 400 | 9.74 | 0.43 | 2.87 | 38 |
| 559 | 7.63 | 0.98 | 3.02 | 47.5 | 500 | 8.31 | 0.69 | 3.02 | 46 |
| 670 | 6.52 | 1.42 | 2.98 | 55.1 | 600 | 7.22 | 1.20 | 3.01 | 51 |
| | | | | | 700 | 6.26 | 1.50 | 2.98 | 57 |
| 342a) | 11.16 | 0.44 | 2.82 | 31.7 | 800 | 5.50 | 1.66 | 3.00 | 69 |
| 626 | 6.79 | 1.32 | 3.12 | 52.9 | 1000 | 4.43 | 1.70 | 3.24 | 89 |
| 838 | 5.28 | 1.67 | 3.04 | 74.2 | 1200 | 3.68 | 1.94 | 3.14 | 74 |
| 947 | 4.73 | 1.63 | 3.20 | 86.8 | 1500 | 3.06 | 2.10 | 3.09 | 124 |
| 998 | 4.44 | 1.69 | 3.24 | 91.4 | 2000 | 2.24 | 2.44 | 2.96 | 143 |
| 1055 | 4.06 | 1.82 | 3.22 | 100.1 | 2500 | 1.88 | 2.89 | 2.85 | 153 |
| 1107 | 3.92 | 1.96 | 3.18 | 102.6 | | | | | |
| 1163 | 3.77 | 1.94 | 3.15 | 106.6 | | | | | |
| 1272 | 3.61 | 1.94 | 3.13 | 111.2 | | | | | |
| 1607 | 2.82 | 2.16 | 3.06 | 128.9 | | | | | |
| 2207 | 2.04 | 2.64 | 2.92 | 149.4 | | | | | |
| 2810 | 1.74 | 3.04 | 2.78 | 155.2 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

85 HORIZON; June 25, 1952; 0043 GCT; 1°03'S, 96°33'W; sounding, 1800 fm; wind, 140°, force 4; weather, partly cloudy; sea, rough; wire angle, 50°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 22.27 | 4.72 | | | 0 | 22.27 | 4.72 | | |
| 7 | 22.27 | 4.51 | | | 10 | 22.23 | 4.51 | | |
| 20 | 22.15 | 4.54 | | | 20 | 22.15 | 4.54 | | |
| 37 | 21.52 | 4.26 | | | 30 | 21.89 | 4.45 | | |
| 57 | 16.42 | 2.09 | | | 50 | 17.75 | 2.13 | | |
| 76 | 14.99 | 2.24 | | | 75 | 15.00 | 2.23 | | |
| 119 | 13.22 | 2.47 | | | 100 | 13.71 | 2.41 | | |
| 166 | 13.00 | 2.20 | | | 150 | 13.07 | 2.25 | | |
| 216 | 12.62 | 2.15 | | | 200 | 12.73 | 2.16 | | |
| 269 | 12.52 | 1.74 | | | 250 | 12.56 | 1.96 | | |
| 372 | 10.49 | 0.52 | | | 300 | 12.02 | 1.22 | | |
| 484 | 8.60 | 0.93 | | | 400 | 9.97 | 0.57 | | |
| 595 | 7.15 | 1.44 | | | 500 | 8.36 | 1.01 | | |
| 823 | 5.22 | 1.74 | | | 600 | 7.10 | 1.46 | | |
| 1048 | 4.34 | 1.74 | | | 700 | 6.13 | 1.64 | | |
| 1264 | 3.70 | 1.96 | | | 800 | 5.38 | 1.72 | | |
| | | | | | 1000 | 4.53 | 1.73 | | |
| | | | | | 1200 | 3.89 | 1.88 | | |

86 HORIZON; June 25, 1952; 1042, 1244 GCT; 2°12.5'S, 96°32'W; sounding, 1870 fm; wind, 140°, force 5; weather, partly cloudy; sea, very rough; wire angle, 20°, 06°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.98 | 4.63 | 1.14 | 1.8 | 0 | 22.98 | 4.63 | 1.14 | 1.8 |
| 9 | 22.98 | 4.65 | 1.13 | 2.9 | 10 | 22.98 | 4.65 | 1.13 | 2.9 |
| 28 | 23.00 | 4.65 | 1.14 | 2.3 | 20 | 23.00 | 4.65 | 1.14 | 2.6 |
| 41 | 22.30 | 4.37 | 1.23 | 4.1 | 30 | 23.00 | 4.63 | 1.14 | 2.4 |
| 63 | 15.02 | 2.40 | 1.81 | 13.0 | 50 | 18.55 | 2.90 | 1.18 | 7.3 |
| 85 | 13.97 | 1.84 | 2.04 | 18.0 | 75 | 14.33 | 2.35 | 1.94 | 17.2 |
| 108 | 13.38 | 1.75 | 2.18 | 18.4 | 100 | 13.51 | 1.80 | 2.20 | 18 |
| 161 | 12.82 | 2.08 | 2.06 | 18.4 | 150 | 12.90 | 2.02 | 2.08 | 18 |
| 213 | 12.68 | 2.02 | 2.17 | 18.7 | 200 | 12.70 | 2.04 | 2.14 | 19 |
| 266 | 12.50 | 1.59 | 2.26 | 21.1 | 250 | 12.55 | 1.80 | 2.23 | 20 |
| 318 | 12.08 | 0.29 | 2.66 | 27.0 | 300 | 12.29 | 0.50 | 2.48 | 25 |
| 417 | 9.24 | 0.47 | 2.88 | 39.4 | 400 | 9.70 | 0.37 | 2.87 | 37 |
| 528 | 7.58 | 1.04 | 3.04 | 45.7 | 500 | 7.93 | 0.93 | 2.99 | 45 |
| 637 | 6.55 | 1.25 | 3.08 | 54.4 | 600 | 6.87 | 1.28 | 3.08 | 51 |
| | | | | | 700 | 6.06 | 1.50 | 3.05 | 60 |
| 343a) | 10.94 | 0.17 | 2.84 | 26.8 | 800 | 5.49 | 1.69 | 3.00 | 68 |
| 630 | 6.51 | 1.44 | 2.88 | 54.2 | 1000 | 4.47 | 1.57 | 3.12 | 93 |
| 844 | 5.28 | 1.74 | 2.99 | 70.9 | 1200 | 3.72 | 1.83 | 3.06 | 107 |
| 953 | 4.66 | 1.51 | 3.08 | 88.6 | 1500 | 3.03 | 1.96 | 3.02 | 122 |
| 1004 | 4.47 | 1.58 | 3.12 | 93.1 | 2000 | 2.24 | 2.30 | 2.86 | 137 |
| 1060 | 4.30 | 1.69 | 3.10b) | 94.9 | 2500 | 1.97 | 2.80 | 2.71 | 148 |
| 1112 | 4.13 | 1.76 | 3.08 | 99.7 | | | | | |
| 1169 | 3.86 | 1.78 | 3.06 | 104.0 | | | | | |
| 1279 | 3.52 | 1.97 | 3.06 | 115.2 | | | | | |
| 1617 | 2.76 | 1.96 | 3.00 | 124.7 | | | | | |
| 2210 | 2.09 | 2.52 | 2.76 | 142.9 | | | | | |
| 2809 | 1.76 | 3.03 | 2.70 | 152.8 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 3.07 and 3.14 µg at/L.

HORIZON; June 25, 1952; 2116 GCT; 3°03.5'S, 96°18.5'W; sounding, 1800 fm; wind, 140°, force 5; weather, partly cloudy; sea, high; wire angle, 23°. 87

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 23.27 | 4.56 | | | 0 | 23.27 | 4.56 | | |
| 9 | 23.26 | 4.75 | | | 10 | 23.26 | 4.75 | | |
| 26 | 23.10 | 4.61 | | | 20 | 23.16 | 4.69 | | |
| 53 | 15.74a) | 1.95 | | | 30 | 23.08 | 4.52 | | |
| 80 | 14.18 | 1.92 | | | 50 | 17.40 | 1.98 | | |
| 106 | 13.68 | 1.70 | | | 75 | 14.33 | 1.92 | | |
| 158 | 13.12 | 0.58 | | | 100 | 13.74 | 1.79 | | |
| 210 | 12.54 | 0.47 | | | 150 | 13.20 | 0.67 | | |
| 261 | 12.14 | 0.31 | | | 200 | 12.64 | 0.47 | | |
| 312 | 11.54 | 0.23 | | | 250 | 12.22 | 0.35 | | |
| 410 | 8.74 | 0.52 | | | 300 | 11.73 | 0.24 | | |
| 512 | 7.82 | 0.48 | | | 400 | 8.90 | 0.49 | | |
| 613 | 6.67 | 1.03 | | | 500 | 7.96 | 0.46 | | |
| 816 | 5.38 | 1.63 | | | 600 | 6.83 | 0.95 | | |
| 1014 | 4.62 | 1.58 | | | 700 | 5.98 | 1.40 | | |
| 1215 | 3.83 | 1.82 | | | 800 | 5.45 | 1.63 | | |
| | | | | | 1000 | 4.68 | 1.58 | | |
| | | | | | 1200 | 3.90 | 1.80 | | |

HORIZON; June 26, 1952; 0700, 0834 GCT; 4°12'S, 96°07'W; sounding, 1940 fm; wind, 130°, force 5; weather, overcast; sea, very rough; wire angle, 25°, 21°. 88

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.30 | 4.68 | 1.16 | 2.9 | 0 | 23.30 | 4.68 | 1.16 | 2.9 |
| 8 | 23.28 | 4.82 | 1.12 | 2.9 | 10 | 23.27 | 4.81 | 1.12 | 2.9 |
| 25 | 23.22 | 4.69 | 1.13 | 3.1 | 20 | 23.24 | 4.72 | 1.12 | 3.0 |
| 38 | 22.67 | 4.46 | 1.18 | 3.4 | 30 | 23.20 | 4.61 | 1.15 | 3.1 |
| 58 | 16.78 | 2.08 | 1.92 | 11.3 | 50 | 19.25 | 3.45 | 1.31 | 8 |
| 79 | 14.46 | 1.13 | 2.24 | 16.2 | 75 | 14.60 | 1.22 | 2.20 | 15 |
| 100 | 13.84 | 0.90 | 2.34 | 20.0 | 100 | 13.84 | 0.90 | 2.34 | 20 |
| 150 | 13.17 | 0.44 | 2.49 | 21.8 | 150 | 13.17 | 0.44 | 2.49 | 22 |
| 199 | 12.72 | 0.32 | 2.58 | 25.7 | 200 | 12.72 | 0.32 | 2.58 | 26 |
| 246 | 12.36 | 0.35 | 2.62b) | 25.9 | 250 | 12.32 | 0.34 | 2.62 | 26 |
| 296 | 11.98 | 0.22 | 2.69 | 28.3 | 300 | 11.90 | 0.21 | 2.70 | 28 |
| 388 | 9.78 | 0.16 | 2.97 | 38.5 | 400 | 9.50 | 0.17 | 2.99 | 40 |
| 492 | 7.94 | 0.33 | 3.08 | 47.9 | 500 | 7.86 | 0.35 | 3.09 | 49 |
| 594 | 7.00 | 0.46 | 3.20 | 57.4 | 600 | 6.96 | 0.59 | 3.13 | 58 |
| | | | | | 700 | 6.16 | 0.98 | 3.16 | 64 |
| 315c) | 11.30 | 0.19 | 3.06 | 29.2 | 800 | 5.55 | 1.34 | 3.20 | 71 |
| 571 | 7.17 | 0.56 | 3.12 | 54.0 | 1000 | 4.64 | 1.63 | 3.19 | 87 |
| 761 | 5.74 | 1.21 | 3.18 | 67.9 | 1200 | 3.79 | 1.62 | 3.06 | 104 |
| 856 | 5.35 | 1.48 | 3.14 | 74.3 | 1500 | 3.06 | 2.20 | 2.89 | 110 |
| 901 | 5.20 | 1.40 | 3.16d) | 77.9 | 2000 | 2.27 | 2.39 | 2.93 | 147 |
| 951 | 4.92 | 1.36 | 3.22 | 82.1 | 2500 | 1.89 | 2.77 | 2.90 | 150 |
| 997 | 4.66 | 1.62 | 3.19 | 86.8 | | | | | |
| 1049 | 4.54 | 1.71 | 3.16 | 87.7 | | | | | |
| 1146 | 4.05 | 1.59 | 3.14e) | 100.4 | | | | | |
| 1456 | 3.14 | 2.14 | 2.89 | 118.4 | | | | | |
| 2021 | 2.24 | 2.41 | 2.93 | 148.3 | | | | | |
| 2609 | 1.84 | 2.89 | 2.89 | 150.5 | | | | | |

a) Alternate value of 15.51°C.
b) Mean value of 2.58 and 2.65 µg at/L.
c) Overlapping casts; reconciliation of property curves when necessary.
d) Alternate value, 3.25 µg at/L, not used in interpolation.
e) Mean value of 3.09 and 3.19 µg at/L.

89

HORIZON; June 26, 1952; 1730 GCT; 5°04'S, 95°56'W; sounding, 1920 fm; wind, 110°, force 4; weather, partly cloudy; sea, high; wire angle, 24°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 23.08 | 4.83 | | | 0 | 23.08 | 4.85 | | |
| 9 | 23.06 | 4.87 | | | 10 | 23.06 | 4.89 | | |
| 27 | 23.03 | 4.85 | | | 20 | 23.05 | 4.87 | | |
| 54 | 18.51a) | 2.59 | | | 30 | 23.03 | 4.64 | | |
| 80 | 15.28 | 1.28 | | | 50 | 19.10 | 3.00 | | |
| 104 | 13.83 | 0.65 | | | 75 | 15.65 | 1.50 | | |
| 152 | 12.87 | 0.44 | | | 100 | 14.07 | 0.74 | | |
| 202 | 12.49 | 0.35 | | | 150 | 12.89 | 0.45 | | |
| 249 | 12.20 | 0.32 | | | 200 | 12.51 | 0.37 | | |
| 297 | 11.80 | 0.32 | | | 250 | 12.19 | 0.34 | | |
| 389 | 10.64 | 0.15 | | | 300 | 11.76 | 0.34 | | |
| 486 | 8.90 | 0.34 | | | 400 | 10.45 | 0.16 | | |
| 579 | 7.45 | 0.31 | | | 500 | 8.65 | 0.34 | | |
| 775 | 5.67 | 1.36 | | | 600 | 7.21 | 0.40 | | |
| 970 | 4.61 | 1.44 | | | 700 | 6.17 | 0.97 | | |
| 1170 | 3.83 | 1.78 | | | 800 | 5.53 | 1.48 | | |
| | | | | | 1000 | 4.48 | 1.50 | | |

90

HORIZON; June 27, 1952; 0200, 0226, 0252, 0415 GCT; 6°01'S, 95°46'W; sounding, 2150 fm; wind, 140°, force 4; weather, partly cloudy; sea, very rough; wire angle, 30°, 45°, 40°, 12°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.18 | 4.69 | 1.16b) | 2.7 | 0 | 24.18 | 4.71 | 1.16 | 2.7 |
| 8 | 24.20 | 4.71 | 1.16 | 2.9 | 10 | 24.20 | 4.73 | 1.16 | 2.9 |
| 26 | 24.20 | 4.73 | 1.15 | 2.9 | 20 | 24.20 | 4.74 | 1.16 | 2.9 |
| 38 | 24.18 | 4.73 | 1.12 | 2.9 | 30 | 24.19 | 4.75 | 1.14 | 2.9 |
| 58 | 24.10 | 4.65 | 1.16 | 2.5 | 50 | 24.13 | 4.73 | 1.12 | 2.6 |
| 76 | 18.58 | 2.53 | 1.76 | 9.4 | 75 | 19.60 | 4.68 | 1.62 | 9 |
| 92 | 15.53 | 1.24 | 2.24 | 12.8 | 100 | 14.79 | 1.00 | 2.30 | 15 |
| 132 | 13.01 | 0.56 | 2.42c) | 22.5 | 150 | 12.80 | 1.55 | 2.50 | 24 |
| 172 | 12.61 | 0.52 | 2.48d) | 23.8 | 200 | 12.36 | 0.47 | 2.59 | 25 |
| 215 | 12.23 | 0.48 | 2.62 | 25.7 | 250 | 11.96 | 0.51 | 2.63 | 27 |
| 258 | 11.91 | 0.51 | 2.64 | 26.8 | 300 | 11.51 | 0.40 | 2.69 | 30 |
| | | | | | 400 | 10.02 | 0.23 | 2.82 | 38 |
| 344 | 10.94 | 0.28 | 2.75 | 33.8 | 500 | 8.60 | 0.30 | 2.89 | 45 |
| | | | | | 600 | 7.43 | 0.28 | 3.10 | 50 |
| 441 | 9.37 | 0.23 | 2.84 | 40.7 | 700 | 6.32 | 0.39 | 3.26 | 59 |
| 548 | 8.04 | 0.36 | 2.92 | 47.2 | 800 | 5.49 | 0.90 | 3.26 | 69 |
| | | | | | 1000 | 4.36 | 1.52 | 3.25 | 90 |
| 358e) | 10.79 | 0.24 | 2.80 | 33.7 | 1200 | 3.76 | 1.94 | 3.18 | 106 |
| 640 | 6.97 | 0.21 | 3.26 | 53.1 | 1500 | 3.03 | 2.13 | 3.03 | 121 |
| 853 | 5.20 | 1.15 | 3.26 | 73.8 | 2000 | 2.35 | 2.34 | 2.94 | 139 |
| 961 | 4.54 | 1.56 | 3.24 | 84.6 | | | | | |
| 1013 | 4.32 | 1.51 | 3.25 | 91.3 | | | | | |
| 1070 | 4.13 | 1.57 | 3.27 | 96.8 | | | | | |
| 1122 | 3.98 | 1.57 | 3.10f) | 100.4 | | | | | |
| 1178 | 3.83 | 1.92 | 3.20 | 103.5 | | | | | |
| 1288 | 3.50 | 1.98 | 3.14g) | 111.2 | | | | | |
| 1626 | 2.82 | 2.20 | 3.01 | 125.5 | | | | | |
| 2228 | 2.12 | 2.49 | 2.90 | 149.4 | | | | | |

a) Alternate value, 18.38°C, not used in interpolation.
b) Mean value of 1.09 and 1.23 µg at/L.
c) Mean value of 2.38 and 2.48 µg at/L.
d) Mean value of 2.41 and 2.54 µg at/L.
e) Overlapping casts; reconciliation of property curves when necessary.
f) Mean value of 3.06 and 3.13 µg at/L.
g) Mean value of 3.10 and 3.17 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 27, 1952; 1450 GCT; 7°09'S, 95°24'W; sounding, 2240 fm; wind, 120°, force 5; weather, overcast; sea, high; wire angle, 21°. 91

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.17 | 4.69 | | | 0 | 24.17 | 4.69 | | |
| 9 | 24.18 | 4.70 | | | 10 | 24.19 | 4.70 | | |
| 28 | 24.20 | 4.69 | | | 20 | 24.20 | 4.70 | | |
| 56 | 24.18 | 4.67 | | | 30 | 24.20 | 4.69 | | |
| 83 | 18.51 | 2.46 | | | 50 | 24.18 | 4.69 | | |
| 109 | 14.68 | 1.08 | | | 75 | 22.20 | 2.56 | | |
| 162 | 12.34 | 0.39 | | | 100 | 15.27 | 2.07 | | |
| 215 | 11.63 | 0.58 | | | 150 | 12.77 | 0.50 | | |
| 268 | 11.10 | 0.09 | | | 200 | 11.80 | 0.53 | | |
| 323 | 10.42 | 0.09 | | | 250 | 11.28 | 0.27 | | |
| 427 | 9.15 | 0.22 | | | 300 | 10.73 | 0.09 | | |
| 536 | 7.87 | 0.25 | | | 400 | 9.49 | 0.18 | | |
| 641 | 6.81 | 0.45 | | | 500 | 8.29 | 0.23 | | |
| 855 | 5.16 | 1.25 | | | 600 | 7.22 | 0.34 | | |
| 1062 | 4.19 | 1.66 | | | 700 | 6.31 | 0.69 | | |
| 1266 | 3.58 | 1.82 | | | 800 | 5.53 | 1.07 | | |
| | | | | | 1000 | 4.44 | 1.54 | | |
| | | | | | 1200 | 3.73 | 1.77 | | |

HORIZON; June 27-28, 1952; 2325, 0102 GCT; 8°01'S, 95°25.5'W; sounding, 2250 fm; wind, 140°, force 5; weather, partly cloudy; sea, high; wire angle, 15°, 18°. 92

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.04 | 4.73 | 1.13a) | 3.1 | 0 | 24.04 | 4.73 | 1.13 | 3.1 |
| 9 | 24.06 | 4.73 | 1.13 | 2.3 | 10 | 24.06 | 4.73 | 1.13 | 2.2 |
| 28 | 24.06 | 4.76 | 1.12 | 2.2 | 20 | 24.06 | 4.74 | 1.12 | 2.2 |
| 42 | 24.02 | 4.73 | 1.13 | 2.3 | 30 | 24.05 | 4.76 | 1.12 | 2.2 |
| 65 | 20.26 | 3.50 | 1.56 | 3.1 | 50 | 24.02 | 4.47 | 1.18 | 2.4 |
| 88 | 15.86 | 1.31 | 2.25 | 9.7 | 75 | 18.30 | 2.50 | 1.84 | 5.8 |
| 112 | 13.48 | 0.15 | 2.82 | 19.4 | 100 | 14.05 | 0.42 | 2.68 | 15 |
| 167 | 12.50 | 0.25 | 2.78 | 23.9 | 150 | 12.71 | 0.18 | 2.80 | 23 |
| 222 | 11.86 | 0.38 | 2.81 | 27.0 | 200 | 12.10 | 0.36 | 2.79 | 26 |
| 277 | 11.22 | 0.26 | 2.84 | 30.4 | 250 | 11.53 | 0.33 | 2.82 | 28 |
| 331 | 10.62 | 0.21 | 2.88 | 32.9 | 300 | 10.97 | 0.23 | 2.86 | 31 |
| 435 | 9.42 | 0.20 | 2.92 | 37.8 | 400 | 9.84 | 0.20 | 2.91 | 36 |
| 546 | 7.84 | 0.17 | 3.08 | 46.1 | 500 | 8.50 | 0.17 | 3.00 | 43 |
| 654 | 6.62 | 0.33 | 3.28 | 53.3 | 600 | 7.21 | 0.25 | 3.13 | 50 |
| | | | | | 700 | 6.19 | 0.46 | 3.17 | 57 |
| 336b) | 10.63 | 0.20 | 2.99 | 33.3 | 800 | 5.39 | 0.80 | 3.16 | 69 |
| 619 | 6.96 | 0.29 | 3.14 | 51.5 | 1000 | 4.37 | 1.49 | 3.25 | 87 |
| 832 | 5.18 | 0.89 | 3.17 | 73.1 | 1200 | 3.68 | 1.81 | 3.36 | 102 |
| 939 | 4.67 | 1.25 | 3.22 | 80.1 | 1500 | 2.90 | 2.15 | 3.14 | 117 |
| 990 | 4.41 | 1.45 | 3.24 | 85.5 | 2000 | 2.19 | 2.57 | 2.99 | 137 |
| 1046 | 4.21 | 1.63 | 3.28 | 89.3 | | | | | |
| 1097 | 4.06 | 1.69 | 3.31 | 92.5 | | | | | |
| 1153 | 3.82 | 1.75 | 3.36 | 97.6 | | | | | |
| 1259 | 3.53 | 1.86 | 3.35 | 104.8 | | | | | |
| 1593 | 2.66 | 2.27 | 3.06 | 120.8 | | | | | |
| 2191 | 2.08 | 2.64 | 2.98 | 144.0 | | | | | |

a) Alternate value, 1.20 µg at/L, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.

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HORIZON; June 28, 1952; 1142 GCT; 8°57'S, 95°11'W; sounding, 2020 fm; wind, 120°, force 5; weather, cloudy; sea, high; wire angle, 31°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 24.14 | 4.66 | | | 0 | 24.14 | 4.66 | | |
| 8 | 24.17 | 4.72 | | | 10 | 24.18 | 4.72 | | |
| 26 | 24.20 | 4.73 | | | 20 | 24.19 | 4.72 | | |
| 51 | 24.16 | 4.68 | | | 30 | 24.20 | 4.72 | | |
| 76 | 21.91a) | 3.74 | | | 50 | 24.16 | 4.67 | | |
| 100 | 16.34 | 1.24 | | | 75 | 22.00 | 3.87 | | |
| 144 | 13.21 | 0.14 | | | 100 | 16.34 | 1.24 | | |
| 189 | 12.18 | 0.18 | | | 150 | 13.05 | 0.14 | | |
| 236 | 11.63 | 0.26 | | | 200 | 12.04 | 0.22 | | |
| 284 | 11.24 | 0.16 | | | 250 | 11.53 | 0.24 | | |
| 378 | 10.34 | 0.21 | | | 300 | 11.10 | 0.17 | | |
| 474 | 9.00 | 0.17 | | | 400 | 10.04 | 0.20 | | |
| 567 | 7.48 | 0.17 | | | 500 | 8.55 | 0.15 | | |
| 770 | 5.60 | 0.66 | | | 600 | 7.05 | 0.21 | | |
| 967 | 4.60 | 1.22 | | | 700 | 6.14 | 0.44 | | |
| 1162 | 3.82 | 1.66 | | | 800 | 5.44 | 0.76 | | |
| | | | | | 1000 | 4.47 | 1.30 | | |

94

HORIZON; June 28, 1952; 2028, 2225 GCT; 9°58.5'S, 95°01'W; sounding, 2050 fm; wind, 120°, force 4; weather, partly cloudy; sea, high; wire angle, 27°, 42°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.21 | 4.65 | 0.99 | 1.6 | 0 | 24.21 | 4.65 | 0.99 | 1.6 |
| 9 | 24.22 | 4.74 | 0.96 | 1.3 | 10 | 24.22 | 4.74 | 0.96 | 1.3 |
| 26 | 24.24 | 4.75 | 0.96 | 1.4 | 20 | 24.24 | 4.75 | 0.96 | 1.4 |
| 39 | 24.18 | 4.75 | 0.96 | 1.4 | 30 | 24.23 | 4.75 | 0.96 | 1.4 |
| 60 | 20.78 | 4.37 | 1.36 | 1.4 | 50 | 22.23 | 4.48 | 0.99 | 1.4 |
| 82 | 18.99 | 4.27 | 1.34 | 1.3 | 75 | 19.60 | 4.32 | 1.21 | 1.3 |
| 103 | 16.34 | 2.43 | 2.03 | 7.4 | 100 | 16.65 | 2.80 | 2.00 | 6.0 |
| 153 | 13.06 | 0.23 | 2.76 | 17.5 | 150 | 13.20 | 0.23 | 2.75 | 17 |
| 204 | 11.97 | 0.44 | 2.84 | 24.7 | 200 | 12.03 | 0.43 | 2.84 | 25 |
| 254 | 11.42 | 0.41 | 2.84b) | 31.5 | 250 | 11.45 | 0.41 | 2.88 | 30 |
| 305 | 10.96 | 0.46 | 2.88 | 31.9 | 300 | 11.00 | 0.46 | 2.88 | 32 |
| 400 | 9.84 | 0.25 | 2.88 | 36.7 | 400 | 9.84 | 0.25 | 2.88 | 37 |
| 502 | 8.40 | 0.39 | 3.10 | 41.4 | 500 | 8.45 | 0.47 | 3.10 | 42 |
| 601 | 7.12 | 0.39 | 3.26 | 47.9 | 600 | 7.15 | 0.50 | 3.26 | 48 |
| | | | | | 700 | 6.09 | 0.49 | 3.42 | 59 |
| 266c) | 11.30 | 0.43 | 2.78 | 28.6 | 800 | 5.44 | 0.94 | 3.46 | 63 |
| 493 | 8.33 | 0.36 | 3.20 | 41.0 | 1000 | 4.40 | 1.66 | 3.40 | 81 |
| 660 | 6.46 | 0.31 | 3.36 | 55.3 | 1200 | 3.72 | 1.86 | 3.36 | 98 |
| 745 | 5.80 | 0.78 | 3.46 | 60.8 | 1500 | 3.03 | 2.08 | 3.29 | 117 |
| 786 | 5.54 | 0.90 | 3.46 | 61.9 | | | | | |
| 831 | 5.26 | 0.98 | 3.44 | 67.7 | | | | | |
| 870 | 5.01 | 1.09 | 3.42 | 73.8 | | | | | |
| 914 | 4.78 | 1.37 | 3.42d) | 75.6 | | | | | |
| 1000 | 4.40 | 1.66 | 3.40e) | 81.4 | | | | | |
| 1272 | 3.52 | 1.88 | 3.35 | 103.5 | | | | | |
| 1767 | 2.54 | 2.34 | 3.20 | 129.8 | | | | | |

a) Alternate value, 21.76°C, not used in interpolation.
b) Mean value of 2.81 and 2.88 µg at/L.
c) Overlapping casts; reconciliation of property curves when necessary.
d) Mean value of 3.38 and 3.46 µg at/L.
e) Mean value of 3.36 and 3.43 µg at/L.

HORIZON; June 29, 1952; 0723 GCT; 9°30'S, 94°08.5'W; sounding, 1980 fm; wind, 120°, force 5; weather, partly cloudy; sea, rough; wire angle, 30°. 95

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 23.91 | 4.86 | | | 0 | 23.91 | 4.86 | | |
| 8 | 23.92 | 4.80 | | | 10 | 23.92 | 4.80 | | |
| 26 | 23.93 | 4.79 | | | 20 | 23.93 | 4.79 | | |
| 50 | 23.92 | 4.73 | | | 30 | 23.93 | 4.79 | | |
| 74 | 19.50 | 4.36 | | | 50 | 23.92 | 4.73 | | |
| 97 | 17.03 | 3.15 | | | 75 | 19.47 | 4.35 | | |
| 143 | 13.00 | 0.07 | | | 100 | 16.65 | 2.55 | | |
| 190 | 12.36 | 0.19 | | | 150 | 12.84 | 0.07 | | |
| 236 | 12.00 | 0.19 | | | 200 | 12.27 | 0.19 | | |
| 285 | 11.38 | 0.33 | | | 250 | 11.83 | 0.23 | | |
| 379 | 10.13 | 0.36 | | | 300 | 11.14 | 0.34 | | |
| 482 | 8.98 | 0.35 | | | 400 | 9.91 | 0.36 | | |
| 580 | 7.42 | 0.12 | | | 500 | 8.69 | 0.30 | | |
| 782 | 5.56 | 0.72 | | | 600 | 7.19 | 0.14 | | |
| 978 | 4.48 | 1.33 | | | 700 | 6.20 | 0.41 | | |
| 1170 | 3.72 | 1.74 | | | 800 | 5.44 | 0.78 | | |
| | | | | | 1000 | 4.39 | 1.40 | | |

HORIZON; June 29, 1952; 1547, 1607, 1740 GCT; 9°00'S, 93°16'W; sounding, 2130 fm; wind, 110°, force 6; weather, cloudy; sea, very rough; wire angle, 15°, 15°, 35°. 96

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.92 | 4.79 | 0.67 | 0 | 0 | 23.92 | 4.79 | 0.67 | 0 |
| 10 | 23.94 | 4.82 | 0.70 | 0.4 | 10 | 23.94 | 4.82 | 0.70 | 0.4 |
| 29 | 23.95 | 4.85 | 0.72 | 0.5 | 20 | 23.95 | 4.84 | 0.71 | 0.5 |
| 43 | 23.93 | 4.81 | 0.72 | 0.5 | 30 | 23.95 | 4.85 | 0.72 | 0.5 |
| 66 | 22.42 | 4.82 | 0.83 | 0.5 | 50 | 23.93 | 4.81 | 0.74 | 0.5 |
| 89 | 18.46 | 4.04 | 1.30 | 1.4 | 75 | 20.80 | 4.62 | 0.94 | 0.8 |
| | | | | | 100 | 15.85 | 3.35 | 1.68 | 1.5 |
| 112 | 14.39 | 2.48 | 1.97 | 1.6 | 150 | 12.79 | 0.50 | 2.57 | 4.0 |
| 166 | 12.48 | 0.25 | 2.67 | 7.4 | 200 | 12.03 | 0.39 | 2.65 | 20 |
| 220 | 11.80 | 0.48 | 2.64 | 25.7 | 250 | 11.40 | 0.43 | 2.67 | 30 |
| 275 | 11.12 | 0.32 | 2.74 | 27.0 | 300 | 10.88 | 0.35 | 2.76 | 32 |
| 332 | 10.52 | 0.24 | 2.80 | 32.0 | 400 | 9.63 | 0.40 | 2.81 | 35 |
| 439 | 9.09 | 0.40 | 2.81 | 36.9 | 500 | 8.13 | 0.32 | 2.93 | 42 |
| 551 | 7.48 | 0.26 | 3.07 | 47.2 | 600 | 7.01 | 0.27 | 3.14 | 52 |
| 662 | 6.44 | 0.31 | 3.16 | 55.1 | 700 | 6.10 | 0.40 | 3.17 | 59 |
| | | | | | 800 | 5.34 | 0.74 | 3.17 | 69 |
| 293a) | 10.92 | 0.35 | 2.72 | 31.7 | 1000 | 4.36 | 1.58 | 3.14 | 85 |
| 573 | 7.30 | 0.25 | 3.12 | 49.9 | 1200 | 3.66 | 1.98 | 3.06 | 102 |
| 774 | 5.50 | 0.63 | 3.18 | 67.0 | 1500 | 2.94 | 2.01 | 3.04 | 123 |
| 872 | 4.94 | 1.07 | 3.15 | 74.2 | 2000 | 2.27 | 2.42 | 2.86 | 142 |
| 919 | 4.72 | 1.21 | 3.18 | 80.1 | | | | | |
| 970 | 4.48 | 1.43 | 3.19 | 80.6 | | | | | |
| 1015 | 4.29 | 1.65 | 3.12 | 83.2 | | | | | |
| 1066 | 4.14 | 1.63 | 3.11 | 90.4 | | | | | |
| 1161 | 3.80 | 1.96 | 3.07 | 98.6 | | | | | |
| 1461 | 3.02 | 2.00 | 3.04 | 120.8 | | | | | |
| 2005 | 2.26 | 2.43 | 2.85 | 142.4 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

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HORIZON; June 30, 1952; 0312 GCT; 8°43'S, 92°12'W; sounding, 2040 fm; wind, 120°, force 5; weather, cloudy; sea, very rough; wire angle, 30°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 23.42 | 4.73 | | | 0 | 23.42 | 4.73 | | |
| 8 | 23.42 | 4.74 | | | 10 | 23.42 | 4.74 | | |
| 24 | 23.41 | 4.77 | | | 20 | 23.41 | 4.76 | | |
| 48 | 23.41 | 4.76 | | | 30 | 23.41 | 4.77 | | |
| 72 | 19.86 | 3.34 | | | 50 | 23.41 | 4.74 | | |
| 95 | 15.01 | 1.86 | | | 75 | 19.20 | 3.20 | | |
| 141 | 12.85 | 0.12 | | | 100 | 14.55 | 1.52 | | |
| 189 | 12.23 | 0.36 | | | 150 | 12.70 | 0.14 | | |
| 235 | 11.70 | 0.38 | | | 200 | 12.06 | 0.37 | | |
| 284 | 11.22 | 0.25 | | | 250 | 11.55 | 0.35 | | |
| 386 | 9.66 | 0.18 | | | 300 | 11.04 | 0.24 | | |
| 486 | 8.18 | 0.20 | | | 400 | 9.44 | 0.20 | | |
| 579 | 7.07 | 0.15 | | | 500 | 8.00 | 0.23 | | |
| 772 | 5.58 | 0.80 | | | 600 | 6.79 | 0.20 | | |
| 960 | 4.58 | 1.25 | | | 700 | 6.06 | 0.58 | | |
| 1145 | 3.87 | 1.81 | | | 800 | 5.41 | 0.87 | | |
| | | | | | 1000 | 4.40 | 1.37 | | |

98

HORIZON; June 30, 1952; 1105, 1237 GCT; 8°20'S, 91°13'W; sounding, 2320 fm; wind, 120°, force 4; weather, drizzle; sea, very rough; wire angle, 12°, 18°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.54 | 4.69 | 0.88a) | 0 | 0 | 23.54 | 4.69 | 0.88 | 0 |
| 10 | 23.56 | 4.61 | 0.88 | 1.3 | 10 | 23.56 | 4.61 | 0.88 | 1.3 |
| 29 | 23.54 | 4.75 | 1.02 | 0.5 | 20 | 23.55 | 4.70 | 0.98 | 1.1 |
| 43 | 23.54 | 4.72 | 0.98 | 0.5 | 30 | 23.54 | 4.75 | 1.02 | 0.5 |
| 66 | 22.70 | 4.48 | 1.06 | 1.3 | 50 | 23.54 | 4.70 | 0.99 | 0.7 |
| 89 | 16.16 | 0.18 | 2.44 | 11.0 | 75 | 20.30 | 0.23 | 1.19 | 4 |
| 112 | 13.93 | 0.44 | 2.66 | 18.0 | 100 | 14.88 | 0.33 | 2.59 | 15 |
| 166 | 12.34 | 0.26 | 2.68 | 26.8 | 150 | 12.66 | 0.33 | 2.68 | 25 |
| 220 | 11.78 | 0.14 | 2.69 | 27.7 | 200 | 11.97 | 0.16 | 2.68 | 27 |
| 272 | 11.30 | 0.78 | 2.77 | 31.1 | 250 | 11.53 | 0.55 | 2.73 | 29 |
| 327 | 10.62 | 0.20 | 2.90 | 38.5 | 300 | 11.01 | 0.46 | 2.81 | 33 |
| 429 | 9.10 | 0.21 | 3.00 | 42.8 | 400 | 9.53 | 0.23 | 2.96 | 42 |
| 539 | 7.62 | 0.13 | 3.19 | 48.2 | 500 | 8.12 | 0.16 | | 46 |
| 646 | 6.48 | 0.37 | 3.31 | 71.8 | 600 | 6.92 | 0.18 | | 51 |
| | | | | | 700 | 6.05 | 0.53 | | 59 |
| 320b) | 10.74 | 0.21 | 2.77 | 35.6 | 800 | 5.59 | 0.89 | 3.16 | 67 |
| 593 | 7.26 | 0.17 | 3.10 | 50.9 | 1000 | 4.44 | 1.50 | 3.18 | 87 |
| 792 | 5.63 | 0.86 | 3.16 | 65.9 | 1200 | 3.72 | 1.86 | 3.08 | 101 |
| 894 | 4.94 | 1.25 | 3.16 | 74.9 | 1500 | 2.97 | 2.14 | 3.02 | 121 |
| 942 | 4.72 | 1.35 | 3.14c) | 81.4 | 2000 | 2.36 | 2.40 | 2.95 | 142 |
| 993 | 4.48 | 1.14 | 3.18 | 85.7 | 2500 | 1.93 | 2.80 | 2.83 | 149 |
| 1044 | 4.24 | 1.15 | 3.17 | 91.8 | | | | | |
| 1097 | 4.05 | 1.71 | 3.20 | 92.9 | | | | | |
| 1198 | 3.72 | 1.86 | 3.08 | 101.0 | | | | | |
| 1519 | 2.94 | 2.16 | 3.02 | 122.2 | | | | | |
| 2094 | 2.18 | 2.43 | 2.92d) | 145.1 | | | | | |
| 2675 | 1.84 | 2.97 | 2.80 | 149.4 | | | | | |

a) Mean value of 0.84 and 0.92 µg at/L.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Mean value of 3.11 and 3.18 µg at/L.
d) Mean value of 2.88 and 2.97 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; June 30, 1952; 2125, 2152 GCT; 7°50'S, 90°26.5'W; sounding, 2270 fm; wind, 140°, force 4; weather, cloudy; sea, high; wire angle, 30°, 40°. 99

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.40 | 4.82 | | | 0 | 23.40 | 4.82 | | |
| 8 | 23.40 | 4.81 | | | 10 | 23.40 | 4.81 | | |
| 26 | 23.38 | 4.82 | | | 20 | 23.39 | 4.81 | | |
| 52 | 23.34 | 4.77 | | | 30 | 23.37 | 4.82 | | |
| 77 | 16.86 | 2.39 | | | 50 | 23.34 | 4.78 | | |
| 100 | 14.36 | 0.13 | | | 75 | 17.30 | 2.65 | | |
| 147 | 12.72 | 0.20 | | | 100 | 14.36 | 0.13 | | |
| 193 | 12.14 | 0.38 | | | 150 | 12.66 | 0.22 | | |
| | | | | | 200 | 12.07 | 0.39 | | |
| 205 | 12.06 | 0.39 | | | 250 | 11.73 | 0.44 | | |
| 249 | 11.73 | 0.44 | | | 300 | 11.27 | 0.22 | | |
| 332 | 10.94 | 0.13 | | | 400 | 10.03 | 0.21 | | |
| 417 | 9.70 | 0.21 | | | 500 | 7.76 | 0.18 | | |
| 499 | 7.77 | 0.18 | | | 600 | 6.85 | 0.24 | | |
| 673 | 6.28 | 0.41 | | | 700 | 6.06 | 0.50 | | |
| 853 | 5.02 | 1.10 | | | 800 | 5.35 | 0.88 | | |
| 1048 | 4.11 | 1.63 | | | 1000 | 4.33 | 1.54 | | |

HORIZON; July 1, 1952; 0428, 0610 GCT; 7°26'S, 89°31'W; sounding, 2250 fm; wind, 140°, force 4; weather, drizzle; sea, rough; wire angle, 22°, 25°. 100

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.14 | 4.71 | 1.14a) | 0 | 0 | 23.14 | 4.71 | 1.14 | 0 |
| 9 | 23.16 | 4.73 | 1.16 | 1.4 | 10 | 23.16 | 4.73 | 1.16 | 1.4 |
| 28 | 23.17 | 4.74 | 1.12 | 1.4 | 20 | 23.16 | 4.74 | 1.14 | 1.4 |
| 41 | 23.14 | 4.73 | 1.10 | 1.3 | 30 | 23.17 | 4.74 | 1.11 | 1.4 |
| 63 | 23.13 | 4.69 | 1.16 | 1.3 | 50 | 23.14 | 4.71 | 1.11 | 1.3 |
| 84 | 17.20 | 1.45 | 2.30 | 7.9 | 75 | 23.12 | 3.70 | 1.48 | 3.5 |
| 105 | 14.06 | 0.14 | 2.74b) | 16.9 | 100 | 14.34 | 0.19 | 2.76 | 15 |
| 156 | 12.70 | 0.24 | 2.84 | 24.8 | 150 | 12.81 | 0.23 | 2.84 | 25 |
| 208 | 12.05 | 0.56 | 2.86 | 25.7 | 200 | 12.14 | 0.54 | 2.86 | 26 |
| 261 | 11.47 | 0.33 | 2.84 | 28.8 | 250 | 11.60 | 0.41 | 2.84 | 28 |
| 315 | 10.96 | 0.23 | 2.93 | 31.3 | 300 | 11.13 | 0.26 | 2.90 | 30 |
| 414 | 9.39 | 0.20 | 3.12c) | 39.4 | 400 | 9.63 | 0.20 | 3.12 | 38 |
| 523 | 7.68 | 0.18 | 3.29 | 47.7 | 500 | 8.04 | 0.18 | 3.28 | 46 |
| 636 | 6.60 | 0.28 | 3.46 | 56.3 | 600 | 6.86 | 0.23 | 3.25 | 54 |
| | | | | | 700 | 6.13 | 0.46 | 3.19 | 62 |
| 325d) | 10.81 | 0.20 | - | 32.2 | 800 | 5.37 | 0.84 | 3.13 | 72 |
| 591 | 7.11 | 0.21 | - | 52.6 | 1000 | 4.45 | 1.40 | 3.12 | 88 |
| 792 | 5.42 | 0.81 | 3.14 | 71.3 | 1200 | 3.80 | 1.68 | 3.06 | 103 |
| 895 | 4.94 | 1.14 | 3.13 | 77.8 | 1500 | 3.00 | 2.14 | 3.00 | 121 |
| 945 | 4.68 | 1.25 | 3.14e) | 83.2 | 2000 | 2.27 | 2.43 | 2.87 | 143 |
| 1001 | 4.45 | 1.40 | 3.12 | 87.7 | 2500 | 1.91 | 2.77 | 2.72 | 149 |
| 1051 | 4.24 | 1.54 | 3.13 | 92.3 | | | | | |
| 1106 | 4.06 | 1.57 | 3.10 | 95.0 | | | | | |
| 1213 | 3.75 | 1.70 | 3.06f) | 104.0 | | | | | |
| 1548 | 2.90 | 2.19 | 2.99 | 123.1 | | | | | |
| 2149 | 2.13 | 2.46 | 2.83g) | 148.3 | | | | | |
| 2756 | 1.80 | 3.03 | 2.66 | 149.4 | | | | | |

a) Alternate value, 1.23 µg at/L, not used in interpolation.
b) Mean value of 2.70 and 2.78 µg at/L.
c) Mean value of 3.08 and 3.15 µg at/L.
d) Overlapping casts; reconciliation of property curves when necessary.
e) Mean value of 3.10 and 3.18 µg at/L.
f) Mean value of 3.02 and 3.09 µg at/L.
g) Mean value of 2.83 and 2.90 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| **101** HORIZON; July 1, 1952; 1401 GCT; 7°00'S, 88°36.5'W; sounding, missing; wind, 120°, force 4; weather, cloudy; sea, very rough; wire angle, 18°. | | | | | | | | | |
| 0 | 23.13 | 4.73 | | | 0 | 23.13 | 4.73 | | |
| 10 | 23.12 | 4.79 | | | 10 | 23.12 | 4.79 | | |
| 29 | 23.14 | 4.75 | | | 20 | 23.13 | 4.77 | | |
| 56 | 23.12 | 4.71 | | | 30 | 23.14 | 4.75 | | |
| 84 | 16.40 | 0.99 | | | 50 | 23.13 | 4.74 | | |
| 111 | 13.84 | 0.14 | | | 75 | 20.60 | 1.67 | | |
| 164 | 12.46 | 0.27 | | | 100 | 14.65 | 0.32 | | |
| 217 | 11.88 | 0.52 | | | 150 | 12.72 | 0.21 | | |
| 269 | 11.40 | 0.36 | | | 200 | 12.05 | 0.47 | | |
| 322 | 10.82 | 0.19 | | | 250 | 11.56 | 0.44 | | |
| 423 | 9.44 | 0.11 | | | 300 | 11.05 | 0.25 | | |
| 529 | 7.74 | 0.13 | | | 400 | 9.79 | 0.13 | | |
| 632 | 6.55 | 0.23 | | | 500 | 8.20 | 0.12 | | |
| 842 | 5.12 | 0.88 | | | 600 | 6.87 | 0.20 | | |
| 1042 | 4.34 | 1.44 | | | 700 | 5.99 | 0.41 | | |
| 1237 | 3.64 | 1.67 | | | 800 | 5.36 | 0.73 | | |
| | | | | | 1000 | 4.51 | 1.34 | | |
| | | | | | 1200 | 3.77 | 1.63 | | |
| **102** HORIZON; July 2, 1952; 0139 GCT; 6°32'S, 87°39'W; sounding, 2370 fm; wind, 140°, force 4; weather, cloudy; sea, rough; wire angle, 31°. | | | | | | | | | |
| 0 | 23.00 | 4.75 | 1.01 | 0.4 | 0 | 23.00 | 4.75 | 1.01 | 0.4 |
| 8 | 23.01 | 4.75 | 0.94 | 0.4 | 10 | 23.02 | 4.76 | 0.94 | 0.4 |
| 26 | 23.03 | 4.78 | 1.01 | 0.5 | 20 | 23.03 | 4.77 | 0.97 | 0.5 |
| 38 | 23.00 | 4.75 | 1.04 | 0.4 | 30 | 23.02 | 4.76 | 1.03 | 0.4 |
| 60 | 22.97 | 4.79 | 1.04 | 0.0 | 50 | 22.98 | 4.78 | 1.04 | 0.0 |
| 81 | 17.69 | 1.73 | 2.14 | 3.1 | 75 | 22.96 | 3.80 | 1.10 | 1.3 |
| 101 | 14.63 | 0.18 | 2.57 | 16.4 | 100 | 14.80 | 0.19 | 2.57 | 16 |
| 148 | 12.64 | 0.17 | 2.60 | 24.5 | 150 | 12.62 | 0.19 | 2.60 | 25 |
| 195 | 12.14 | 0.98 | 2.56 | 25.7 | 200 | 12.10 | 0.94 | 2.56 | 26 |
| 242 | 11.66 | 0.75 | 2.55 | 25.9 | 250 | 11.58 | 0.74 | 2.55 | 26 |
| 292 | 11.11 | 0.78 | 2.55 | 28.3 | 300 | 11.03 | 0.76 | 2.56 | 29 |
| 388 | 9.92 | 0.12 | 2.80 | 38.3 | 400 | 9.65 | 0.12 | 2.83 | 39 |
| 494 | 7.82 | 0.21 | 3.00a) | 47.9 | 500 | 7.76 | 0.24 | 3.01 | 49 |
| 605 | 6.72 | 0.52 | 3.13 | 56.7 | 600 | 6.77 | 0.51 | 3.13 | 56 |

a) Mean value of 2.94 and 3.06 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 2, 1952; 1200, 1243 GCT; 6°03'S, 86°43'W; sounding, 2290 fm; wind, 110°, force 4; weather, cloudy; sea, rough; wire angle, 18°, 26°. 103

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.41 | 4.76 | | | 0 | 21.41 | 4.76 | | |
| 9 | 21.42 | 4.84 | | | 10 | 21.42 | 4.84 | | |
| 28 | 21.42 | 4.86 | | | 20 | 21.42 | 4.86 | | |
| 55 | 17.11 | 1.50 | | | 30 | 21.42 | 4.84 | | |
| 82 | 15.15 | 0.67 | | | 50 | 19.50 | 2.45 | | |
| 108 | 13.92 | 1.10 | | | 75 | 15.60 | 0.75 | | |
| 161 | 13.08 | 0.43 | | | 100 | 14.19 | 0.58 | | |
| 213 | 12.66 | 0.37 | | | 150 | 13.23 | 0.44 | | |
| 266 | 12.18 | 0.48 | | | 200 | 12.76 | 0.38 | | |
| 320 | 11.57 | 1.02 | | | 250 | 12.33 | 0.41 | | |
| 419 | 9.43 | 0.10 | | | 300 | 11.84 | 0.89 | | |
| 527 | 7.42 | 0.41 | | | 400 | 9.84 | 0.17 | | |
| 632 | 6.37 | 0.51 | | | 500 | 7.89 | 0.34 | | |
| 850 | 5.12 | 1.13 | | | 600 | 6.64 | 0.48 | | |
| | | | | | 700 | 5.93 | 0.67 | | |
| 1025 | 4.48 | 1.28 | | | 800 | 5.37 | 1.00 | | |
| 1223 | 3.82 | 1.52 | | | 1000 | 4.57 | 1.26 | | |
| | | | | | 1200 | 3.89 | 1.48 | | |

HORIZON; July 2, 1952; 1908, 2100 GCT; 5°48'S, 85°54'W; sounding, 2240 fm; wind, 120°, force 4; weather, overcast; sea, rough; wire angle, 28°, 22°. 104

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.94 | 4.83 | 1.16 | 1.3 | 0 | 20.94 | 4.83 | 1.16 | 1.3 |
| 8 | 20.94 | 4.85 | 1.36 | 1.4 | 10 | 20.93 | 4.85 | 1.37 | 1.4 |
| 24 | 20.88 | 4.82 | 1.40 | 1.4 | 20 | 20.90 | 4.83 | 1.39 | 1.4 |
| 37 | 20.56 | 4.61 | 1.52a) | 1.6 | 30 | 20.82 | 4.76 | 1.43 | 1.5 |
| 58 | 17.63 | 1.78 | 2.02 | 9.4 | 50 | 19.40 | 3.65 | 2.84 | 6.0 |
| 78 | 15.45 | 1.42 | 2.07 | 13.9 | 75 | 15.63 | 1.42 | 2.07 | 13.5 |
| 99 | 14.93 | 1.76 | 1.92b) | 14.2 | 100 | 14.91 | 1.76 | 1.96 | 14 |
| 149 | 14.18 | 1.03 | 2.20 | 18.4 | 150 | 14.16 | 1.03 | 2.20 | 18 |
| 199 | 13.67 | 0.64 | 2.31 | 21.2 | 200 | 13.65 | 0.64 | 2.31 | 21 |
| 251 | 12.88 | 0.48 | 2.44 | 23.4 | 250 | 12.88 | 0.48 | 2.44 | 23 |
| 302 | 12.22 | 0.21 | 2.66 | 28.1 | 300 | 12.26 | 0.22 | 2.61 | 28 |
| 404 | 9.79 | 0.27 | 2.88 | 36.7 | 400 | 9.89 | 0.26 | 2.87 | 37 |
| 513 | 7.60 | 0.24 | 3.10 | 51.1 | 500 | 7.76 | 0.24 | 3.09 | 49 |
| 624 | 6.64 | 0.25 | 3.17 | 60.3 | 600 | 6.83 | 0.27 | 3.12 | 57 |
| | | | | | 700 | 6.11 | 0.56 | 3.08 | 65 |
| 322c) | 11.90 | 0.17 | 2.63 | 29.3 | 800 | 5.53 | 0.90 | 3.01 | 72 |
| 607 | 6.74 | 0.30 | 3.07 | 57.8 | 1000 | 4.59 | 1.33 | 2.98 | 89 |
| 819 | 5.42 | 0.98 | 2.99 | 73.4 | 1200 | 3.85 | 1.63 | 2.94 | 103 |
| 925 | 4.88 | 1.25 | 2.96 | 82.8 | 1500 | 3.09 | 1.90 | 2.92 | 120 |
| 975 | 4.69 | 1.28 | 3.02d) | 86.8 | 2000 | 2.37 | 2.42 | 2.81 | 141 |
| 1031 | 4.48 | 1.39 | 3.06e) | 92.0 | 2500 | 1.94 | 2.82 | 2.69 | 149 |
| 1081 | 4.34 | 1.43 | 3.10f) | 95.0 | | | | | |
| 1136 | 4.12 | 1.54 | 3.03 | 97.4 | | | | | |
| 1242 | 3.75 | 1.66 | 2.88 | 106.9 | | | | | |
| 1566 | 2.90 | 1.99 | 2.92 | 122.2 | | | | | |
| 2145 | 2.17 | 2.53 | 2.75 | 147.8 | | | | | |
| 2749 | 1.80 | 3.00 | 2.68 | 149.4 | | | | | |

a) Mean value of 1.49 and 1.56 µg at/L.
b) Mean value of 1.89 and 1.96 µg at/L.
c) Overlapping casts; reconciliation of property curves when necessary.
d) Mean value of 2.97 and 3.06 µg at/L.
e) Mean value of 3.00 and 3.11 µg at/L.
f) Mean value of 3.06 and 3.13 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

105 HORIZON; July 3, 1952; 0518 GCT; 5°18'S, 85°04'W; sounding, 2390 fm; wind, 160°, force 4; weather, overcast; sea, rough; wire angle, 12°.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 20.92 | 4.54 | | 0 | 20.92 | 4.54 | |
| 9 | 20.92 | 4.57 | | 10 | 20.92 | 4.56 | |
| 28 | 20.61 | 4.33 | | 20 | 20.87 | 4.47 | |
| 56 | 15.65 | 1.75 | | 30 | 18.15 | 4.24 | |
| 82 | 15.00 | 1.46 | | 50 | 15.89 | 1.96 | |
| 110 | 14.66 | 2.01 | | 75 | 15.12 | 1.46 | |
| 163 | 14.36 | 1.88 | | 100 | 14.74 | 1.93 | |
| 216 | 13.81 | 1.10 | | 150 | 14.45 | 1.95 | |
| 266 | 13.08 | 0.56 | | 200 | 14.02 | 1.39 | |
| 318 | 12.44 | 0.32 | | 250 | 13.29 | 0.70 | |
| 417 | 9.70 | 0.14 | | 300 | 12.65 | 0.38 | |
| 519 | 7.60 | 0.16 | | 400 | 10.30 | 0.16 | |
| 617 | 6.71 | 0.44 | | 500 | 7.83 | 0.15 | |
| 821 | 5.50 | 0.89 | | 600 | 6.85 | 0.40 | |
| 1027 | 4.59 | 1.30 | | 700 | 6.16 | 0.64 | |
| 1237 | 3.72 | 1.64 | | 800 | 5.60 | 0.83 | |
| | | | | 1000 | 4.70 | 1.25 | |
| | | | | 1200 | 3.87 | 1.60 | |

106 HORIZON; July 3, 1952; 1358, 1520 GCT; 4°48'S, 84°12'W; sounding, 2180 fm; wind, 160°, force 3; weather, overcast; sea, moderate; wire angle, 12°, 25°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.64 | 4.85 | 1.45a) | 4.3 | 0 | 19.64 | 4.85 | 1.45 | 4.3 |
| 10 | 19.64 | 4.88 | 1.49 | 4.3 | 10 | 19.64 | 4.88 | 1.49 | 4.3 |
| 29 | 19.05 | 4.66 | 1.50b) | 6.8 | 20 | 19.11 | 4.82 | 1.51 | 5.5 |
| 42 | 15.74 | 0.90 | 2.14 | 14.0 | 30 | 18.45 | 4.40 | 1.53 | 6.9 |
| 66 | 14.96 | 1.46 | 1.93 | 16.0 | 50 | 15.41 | 1.13 | 2.13 | 15.0 |
| 89 | 14.60 | 1.35 | 2.00 | 18.2 | 75 | 14.76 | 1.44 | 1.94 | 17 |
| 112 | 14.36 | 1.27 | 2.03c) | 18.0 | 100 | 14.49 | 1.31 | 2.01 | 18 |
| 167 | 13.56 | 0.88 | 2.23d) | 20.2 | 150 | 13.82 | 1.01 | 2.20 | 19 |
| 221 | 12.70 | 0.18 | 2.46 | 25.6 | 200 | 13.03 | 0.42 | 2.40 | 24 |
| 275 | 12.08 | 0.50 | 2.42 | 25.9 | 250 | 12.34 | 0.33 | 2.45 | 26 |
| 331 | 11.62 | 0.61 | 2.50e) | 27.9 | 300 | 11.90 | 0.59 | 2.46 | 27 |
| 436 | 9.12 | 0.16 | 2.86 | 41.0 | 400 | 9.98 | 0.34 | 2.96 | 36 |
| 545 | 7.40 | 0.47 | 2.91 | 51.5 | 500 | 7.97 | 0.29 | 2.92 | 50 |
| 652 | 6.62 | 0.58 | 2.92 | 61.2 | 600 | 6.99 | 0.53 | 2.92 | 56 |
| | | | | | 700 | 6.34 | 0.64 | 2.94 | 66 |
| 458f) | 8.44 | 0.03 | 2.92 | 47.2 | 800 | 5.76 | 0.84 | 3.02 | 72 |
| 549 | 7.24 | 0.52 | 2.90g) | 52.7 | 1000 | 4.58 | 1.23 | 3.07 | 91 |
| 736 | 6.12 | 0.70 | 2.97 | 68.9 | 1200 | 3.77 | 1.60 | 3.01 | 107 |
| 833 | 5.52 | 0.89 | 3.00h) | 73.8 | 1500 | 3.13 | 1.89 | 2.81 | 124 |
| 881 | 5.19 | 1.01 | 3.03 | 77.8 | 2000 | 2.26 | 2.48 | 2.70 | 148 |
| 929 | 4.94 | 1.08 | 3.08 | 84.1 | 2500 | (1.90) | (2.83) | (2.58) | (150) |
| 978 | 4.67 | 1.18 | 3.07 i) | 89.6 | | | | | |
| 1027 | 4.52 | 1.27 | 3.07 j) | 93.1 | | | | | |
| 1124 | 4.09 | 1.48 | 3.06 | 101.0 | | | | | |
| 1423 | 3.28 | 1.82 | 2.84 | 120.4 | | | | | |
| 1934 | 2.32 | 2.42 | 2.72 | 146.2 | | | | | |
| 2470 | 1.90 | 2.81 | 2.60k) | 150.0 | | | | | |

a) Alternate value, 1.54 µg at/L, not used in interpolation.
b) Mean value of 1.46 and 1.53 µg at/L.
c) Alternate value, 1.94 µg at/L, not used in interpolation.
d) Mean value of 2.19 and 2.27 µg at/L.
e) Mean value of 2.46 and 2.53 µg at/L.
f) Overlapping casts; reconciliation of property curves when necessary.
g) Mean value of 2.86 and 2.93 µg at/L.
h) Mean value of 2.97 and 3.04 µg at/L.
i) Alternate value, 2.91 µg at/L, not used in interpolation.
j) Alternate value, 3.00 µg at/L, not used in interpolation.
k) Mean value of 2.56 and 2.63 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 3, 1952; 2312 GCT; 4°30'S, 83°13.5'W; sounding, 1890 fm; wind, 160°, force 4; weather, overcast; sea, rough; wire angle, 10°. 107

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.29 | 4.36 | | | 0 | 19.29 | 4.36 | | |
| 10 | 19.28 | 4.40 | | | 10 | 19.28 | 4.40 | | |
| 28 | 19.08 | 4.40 | | | 20 | 19.20 | 4.40 | | |
| 56 | 17.61 | 2.39 | | | 30 | 19.07 | 4.38 | | |
| 84 | 14.75 | 0.94 | | | 50 | 18.52 | 3.70 | | |
| 111 | 13.80 | 1.21 | | | 75 | 15.60 | 1.15 | | |
| 166 | 13.19 | 0.53 | | | 100 | 14.13 | 0.80 | | |
| 222 | 12.69 | 0.34 | | | 150 | 13.32 | 0.58 | | |
| 276 | 12.04 | 0.33 | | | 200 | 12.86 | 0.40 | | |
| 333 | 11.44 | 0.45 | | | 250 | 12.33 | 0.33 | | |
| 438 | 8.08 | 0.22 | | | 300 | 11.81 | 0.37 | | |
| 550 | 6.93 | 0.43 | | | 400 | 11.03 | 0.26 | | |
| 656 | 6.30 | 0.60 | | | 500 | 7.33 | 0.33 | | |
| 874 | 5.21 | 0.49u | | | 600 | 6.62 | 0.52 | | |
| 1084 | 4.34 | 2.24u | | | 700 | 6.06 | 0.60 | | |
| 1287 | 3.53 | 2.61u | | | 800 | 5.57 | | | |
| | | | | | 1000 | 4.70 | | | |
| | | | | | 1200 | 3.90 | | | |

HORIZON; July 4, 1952; 0640, 0711, 0836 GCT; 4°03'S, 82°14'W; sounding, 1790 fm; wind, 170°, force 2; weather, overcast; sea, slight; wire angle, 17°, 33°, 35°. 108

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.29 | 3.61 | 1.88 | 10.4 | 0 | 17.29 | 3.61 | 1.88 | 10.4 |
| 10 | 17.26 | 3.52 | 1.82 | 10.3 | 10 | 17.26 | 3.52 | 1.82 | 10.3 |
| 28 | 17.28 | 3.48 | 1.80 | 10.4 | 20 | 17.27 | 3.49 | 1.81 | 10.4 |
| 42 | 16.96 | 2.86 | 1.87 | 11.3 | 30 | 17.25 | 3.46 | 1.80 | 10.8 |
| 64 | 15.86 | 2.06 | 1.88 | 12.2 | 50 | 17.03 | 2.40 | 1.88 | 11.5 |
| 86 | 15.39 | 2.21 | 1.88 | 13.1 | 75 | 15.55 | 2.11 | 1.88 | 13 |
| 107 | 15.22 | 2.44 | 1.88 | 13.0 | 100 | 15.27 | 2.42 | 1.88 | 13 |
| 156 | 14.34 | 1.09 | 2.27 | 19.1 | 150 | 14.45 | 1.17 | 2.26 | 18 |
| 206 | 13.72 | 0.79 | 2.32 | 20.2 | 200 | 13.80 | 0.83 | 2.31 | 20 |
| | | | | | 250 | 13.01 | 0.24 | 2.58 | 25 |
| 237 | 13.21 | 0.24 | 2.55 | 23.4 | 300 | 12.10 | 0.25 | 2.65 | 32 |
| 287 | 12.45 | 0.27 | 2.62 | 27.2 | 400 | 9.45 | 0.23 | 2.92 | 43 |
| 388 | 9.68 | 0.21 | 2.92 | 42.1 | 500 | 7.99 | 0.42 | 2.89 | 50 |
| 495 | 8.02 | 0.42 | 2.89 | 49.9 | 600 | 7.18 | 0.50 | 2.93 | 57 |
| 602 | 7.18 | 0.51 | 2.93 | 57.1 | 700 | 6.27 | 0.84 | 3.03 | 68 |
| | | | | | 800 | 5.54 | 1.13 | 3.08 | 76 |
| 290a) | 12.43 | 0.29 | 2.62 | 32.8 | 1000 | 4.76 | 1.36 | 2.98 | 93 |
| 559 | 7.65 | 0.41 | 2.95b) | 52.2 | 1200 | 3.86 | 1.59 | | 110 |
| 756 | 5.80 | 1.00 | 3.10 | 72.5 | 1500 | 2.93 | 1.97 | | 131 |
| 856 | 5.26 | 1.23 | 3.03 | 79.0 | | | | | |
| 903 | 5.06 | 1.29 | 3.06 | 80.1 | | | | | |
| 954 | 4.91 | 1.35 | 3.06 | 91.3 | | | | | |
| 1002 | 4.74 | 1.36 | 2.98 | 92.5 | | | | | |
| 1054 | 4.48 | 1.31 | 3.13 | 101.0 | | | | | |
| 1154 | 4.04 | 1.50 | 2.96c) | 106.6 | | | | | |
| 1423 | 3.08 | 1.89 | 2.98 | 126.7 | | | | | |
| 1862 | 2.42 | 2.24 | 2.90 | 145.1 | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 3.04 µg at/L, not used in interpolation.
c) Mean value of 2.93 and 3.00 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

109 HORIZON; July 4, 1952; 2056, 2128 GCT; 3°41'S, 81°30'W; sounding, 750 fm; wind, 190°, force 5; weather, overcast; sea, rough; wire angle, 32°, 45°.

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 18.51 | 3.75 | 0 | 18.51 | 3.75 | |
| 8 | 18.10 | 3.43 | 10 | 17.20 | 3.28 | |
| 21 | 16.10 | 2.11 | 20 | 16.16 | 2.12 | |
| 40 | 15.52 | 1.84 | 30 | 15.76 | 1.99 | |
| 59 | 15.34 | 1.53 | 50 | 15.41 | 1.65 | |
| 78 | 15.25 | 1.57 | 75 | 15.24 | 1.52 | |
| 120 | 15.01 | 1.49 | 100 | 15.12 | 1.51 | |
| 157 | 14.41 | 1.17 | 150 | 14.55 | 1.27 | |
| 196 | 13.68 | 0.89 | 200 | 13.60 | 0.87 | |
| 233 | 13.10 | 0.84 | 250 | 12.76 | 0.73 | |
| 316 | 11.18 | 0.20 | 300 | 11.56 | 0.27 | |
| 393 | 9.36 | 0.16 | 400 | 9.24 | 0.17 | |
| | | | 500 | 7.96 | 0.40 | |
| 451 | 8.46 | 0.31 | 600 | 7.12 | 0.57 | |
| 613 | 7.01 | 0.59 | 700 | 6.30 | 0.84 | |
| 783 | 5.72 | 1.05 | 800 | 5.61 | 1.07 | |
| 969 | 4.76 | 1.31 | | | | |

110 HORIZON; July 10, 1952; 0331 GCT; 5°10'S, 81°30.5'W; sounding, 630 fm; wind, 180°, force 4; weather, partly cloudy; sea, rough; wire angle, 21°.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 16.42 | 3.75 | 1.74 | 0 | 16.42 | 3.75 | 1.74 |
| 9 | 16.47 | 3.80 | 1.67 | 10 | 16.46 | 3.80 | 1.67 |
| 24 | 16.34 | 3.53 | 1.72 | 20 | 16.37 | 3.56 | 1.70 |
| 46 | 16.16 | 3.46 | 1.76 | 30 | 16.28 | 3.53 | 1.73 |
| 67 | 15.34 | 1.38 | 1.90a) | 50 | 16.06 | 3.25 | 1.77 |
| 88 | 15.14 | 1.60 | 1.93 | 75 | 15.25 | 1.43 | 1.92 |
| 133 | 14.88 | 1.87 | 1.89b) | 100 | 15.05 | 1.68 | 1.92 |
| 179 | 14.56 | 1.39 | 2.02 | 150 | 14.76 | 1.84 | 1.90 |
| 168 | 14.63 | 1.72 | 1.94 | 200 | 13.72 | 0.58 | 2.26 |
| 204 | 13.58 | 0.52 | 2.32 | 250 | 12.20 | 0.30 | 2.48 |
| 276 | 11.70 | 0.23 | 2.55 | 300 | 11.34 | 0.26 | 2.60 |
| 341 | 10.44 | 0.15 | 2.66 | 400 | 8.51 | 0.22 | 2.82 |
| 411 | 8.42 | 0.23 | 2.85 | 500 | 7.57 | 0.33 | 2.98 |
| 560 | 7.06 | 0.41 | 3.03 | 600 | 6.74 | 0.47 | 3.06 |
| 719 | 5.74 | 0.75 | 3.11c) | 700 | 5.80 | 0.70 | 3.11 |

111 HORIZON; July 10, 1952; 1114, 1147 GCT; 5°46'S, 81°56.5'W; sounding, 2990 fm; wind, 140°, force 4; weather, cloudy; sea, rough; wire angle, 20°, 22°.

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 18.45 | 4.70 | 0 | 18.45 | 4.70 | |
| 9 | 18.48 | 4.60 | 10 | 18.48 | 4.59 | |
| 23 | 18.46 | 4.50 | 20 | 18.46 | 4.53 | |
| 49 | 17.34 | 2.51 | 30 | 18.39 | 4.42 | |
| 70 | 15.62 | 0.95 | 50 | 17.20 | 3.48 | |
| 95 | 14.92 | 0.74 | 75 | 15.44 | 2.40 | |
| 143 | 13.95 | 1.13 | 100 | 14.81 | 1.90 | |
| 192 | 13.23 | 0.55 | 150 | 13.83 | 1.02 | |
| | | | 200 | 13.14 | 0.50 | |
| 243 | 12.62 | 0.33 | 250 | 12.49 | 0.30 | |
| 287 | 11.64 | 0.18 | 300 | 11.30 | 0.17 | |
| 393 | 9.13 | 0.22 | 400 | 9.01 | 0.22 | |
| 493 | 7.66 | 0.32 | 500 | (7.62) | (0.34) | |

a) Alternate value, 1.97 µg at/L, not used in interpolation.
b) Alternate value, 1.81 µg at/L, not used in interpolation.
c) Alternate value, 3.25 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 10, 1952; 1752, 1849 GCT; 6°21.5'S, 82°23'W; sounding, 2380 fm; wind, 150°, force 5; weather, overcast; sea, rough; wire angle, 19°, 30°. 112

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.58 | 4.73 | 1.62a) | 8.1 | 0 | 18.58 | 4.73 | 1.62 | 8.1 |
| 10 | 18.59 | 4.78 | 1.64 | 8.1 | 10 | 18.59 | 4.78 | 1.64 | 8.1 |
| 24 | 18.57 | 4.77 | 1.62 | 8.3 | 20 | 18.57 | 4.78 | 1.63 | 8.8 |
| 51 | 16.43 | 2.14 | 2.06 | 12.8 | 30 | 18.53 | 4.71 | 1.63 | 9.8 |
| 74 | 14.80 | 0.69 | 2.22b) | 16.4 | 50 | 16.70 | 2.40 | 2.05 | 12.7 |
| 100 | 14.14 | 0.94 | 2.27 | 18.0 | 75 | 14.78 | 0.69 | 2.25 | 16.5 |
| 149 | 13.36 | 0.83 | 2.31 | 21.2 | 100 | 14.14 | 0.94 | 2.27 | 18.0 |
| 198 | 12.80 | 0.35 | 2.53 | 24.7 | 150 | 13.34 | 0.83 | 2.31 | 21 |
| | | | | | 200 | 12.68 | 0.36 | 2.54 | 25 |
| 234 | 11.97 | 0.44 | 2.62 | 26.1 | 250 | 11.85 | 0.44 | 2.62 | 27 |
| 278 | 11.64 | 0.42 | 2.63 | 27.2 | 300 | 11.36 | 0.36 | 2.67 | 28 |
| 379 | 9.84 | 0.14 | 2.94 | 36.9 | 400 | 9.36 | 0.12 | 2.99 | 39 |
| 476 | 8.04 | 0.11 | 3.15 | 47.2 | 500 | 7.74 | 0.13 | 3.16 | 50 |
| 573 | 6.92 | 0.29 | 3.17 | 57.2 | 600 | 6.67 | 0.37 | 3.16 | 60 |
| 764 | 5.52 | 0.91 | 3.10 | 76.7 | 700 | 5.93 | 0.69 | 3.13 | 71 |
| 963 | 4.66 | 1.26 | 3.16 | 92.0 | 800 | 5.35 | 0.98 | 3.11 | 80 |
| 1160 | 3.82 | 1.56 | 3.24 | 107.3 | 1000 | 4.50 | 1.32 | 3.17 | 95 |

HORIZON; July 11, 1952; 0114 GCT; 7°00'S, 82°50'W; sounding, 2370 fm; wind, 310°, force 5; weather, cloudy; sea, rough; wire angle, 12°. 113

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 17.17 | 4.55 | 0 | 17.17 | 4.55 | |
| 10 | 17.18 | 4.56 | 10 | 17.18 | 4.56 | |
| 29 | 17.16 | 4.51 | 20 | 17.17 | 4.54 | |
| 57 | 16.37 | 3.04 | 30 | 17.15 | 4.50 | |
| 85 | 15.18 | 1.10 | 50 | 16.60 | 3.56 | |
| 112 | 14.03 | 1.54 | 75 | 15.60 | 1.34 | |
| 168 | 13.26 | 0.41 | 100 | 14.33 | 0.90 | |
| 222 | 12.62 | 0.16 | 150 | 13.48 | 0.53 | |
| 276 | 11.85 | 0.20 | 200 | 12.90 | 0.23 | |
| 332 | 11.16 | 0.16 | 250 | 12.20 | 0.17 | |
| 439 | 8.35 | 0.15 | 300 | 11.56 | 0.17 | |
| 548 | 6.86 | 0.17 | 400 | 9.53 | 0.16 | |
| 655 | 6.04 | 0.46 | 500 | 7.39 | 0.14 | |
| 870 | 4.99 | 1.02 | 600 | 6.42 | 0.31 | |
| 1079 | 4.04 | 1.46 | 700 | 5.81 | 0.59 | |
| 1282 | 3.38 | 1.80 | 800 | 5.30 | 0.86 | |
| | | | 1000 | 4.36 | 1.29 | |
| | | | 1200 | 3.62 | 1.66 | |

HORIZON; July 11, 1952; 0713 GCT; 7°38.5'S, 83°16'W; sounding, 2380 fm; wind, 140°, force 5; weather, cloudy; sea, very rough; wire angle, 20°. 114

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 19.72 | 4.86 | 1.67 | 0 | 19.72 | 4.86 | 1.67 |
| 10 | 19.72 | 4.90 | 1.60 | 10 | 19.72 | 4.90 | 1.60 |
| 29 | 19.72 | 4.87 | 1.58 | 20 | 19.72 | 4.89 | 1.58 |
| 56 | 17.04 | 1.42 | 2.55 | 30 | 19.72 | 4.87 | 1.58 |
| 82 | 14.04 | 0.15 | 2.77 | 50 | 19.66 | 2.25 | 1.80 |
| 109 | 13.34 | 0.16 | 3.11c) | 75 | 14.40 | 0.23 | 2.72 |
| 162 | 12.62 | 0.21 | 3.02d) | 100 | 13.54 | 0.15 | 3.06 |
| 215 | 12.04 | 0.20 | 3.02 | 150 | 12.78 | 0.20 | 3.05 |
| 268 | 11.36 | 0.20 | 3.08 | 200 | 12.20 | 0.20 | 3.02 |
| 321 | 10.56 | 0.20 | 3.11e) | 250 | 11.58 | 0.20 | 3.06 |
| 424 | 8.64 | 0.18 | 3.37 | 300 | 10.90 | 0.20 | 3.09 |
| 530 | 7.39 | 0.19 | 3.46 | 400 | 9.05 | 0.19 | 3.30 |
| 628 | 6.32 | 0.26 | 3.44 | 500 | 7.73 | 0.19 | 3.45 |
| 845 | 4.96 | 0.91 | 3.44 | 600 | 6.58 | 0.23 | 3.45 |
| 1051 | 4.19 | 1.40 | - | 700 | 5.81 | 0.44 | 3.44 |
| 1249 | 3.64 | 1.64 | 3.49f) | 800 | 5.21 | 0.75 | 3.44 |
| | | | | 1000 | 4.35 | 1.30 | 3.53 |
| | | | | 1200 | 3.76 | 1.59 | 3.52 |

a) Alternate value, 1.69 µg at/L, not used in interpolation.
b) Mean value of 2.18 and 2.25 µg at/L.
c) Alternate value, 3.24 µg at/L, not used in interpolation.
d) Mean value of 2.98 and 3.06 µg at/L.
e) Alternate value, 3.04 µg at/L, not used in interpolation.
f) Alternate value, 3.66 µg at/L, not used in interpolation.

115 HORIZON; July 2, 1952; 1415 GCT; 8°16'S, 83°42'W; sounding, 2450 fm; wind, 120°, force 5; weather, overcast; sea, high; wire angle, 18°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 19.05 | 4.76 | | | 0 | 19.05 | 4.76 | | |
| 9 | 19.08 | 4.79 | | | 10 | 19.07 | 4.79 | | |
| 28 | 19.05 | 4.79 | | | 20 | 19.06 | 4.79 | | |
| 55 | 15.86 | 0.54 | | | 30 | 19.05 | 4.78 | | |
| 82 | 13.88 | 0.13 | | | 50 | 18.30 | 3.65 | | |
| 108 | 13.64 | 0.18 | | | 75 | 14.00 | 0.14 | | |
| 161 | 12.85 | 0.20 | | | 100 | 13.73 | 0.16 | | |
| 215 | 12.07 | 0.16 | | | 150 | 13.04 | 0.20 | | |
| 269 | 11.52 | 0.19 | | | 200 | 12.26 | 0.17 | | |
| 322 | 10.72 | 0.16 | | | 250 | 11.69 | 0.17 | | |
| 428 | 8.47 | 0.20 | | | 300 | 11.10 | 0.17 | | |
| 536 | 7.24 | 0.16 | | | 400 | 8.99 | 0.19 | | |
| 641 | 6.54 | 0.28 | | | 500 | 7.54 | 0.18 | | |
| 857 | 5.20 | 0.70 | | | 600 | 6.81 | 0.24 | | |
| 1066 | 4.27 | 1.32 | | | 700 | 6.15 | 0.38 | | |
| 1268 | 3.62 | 1.62 | | | 800 | 5.53 | 0.56 | | |
| | | | | | 1000 | 4.52 | 1.15 | | |
| | | | | | 1200 | 3.82 | 1.53 | | |

116 HORIZON; July 2, 1952; 2158 GCT; 9°08'S, 84°11.5'W; sounding, 2470 fm; wind, 140°, force 6; weather, cloudy; sea, very rough; wire angle, 20°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.50 | 4.97 | 1.40a) | 3.6 | 0 | 20.50 | 4.97 | 1.40 | 3.6 |
| 9 | 20.49 | 5.02 | 1.39 | 3.6 | 10 | 20.49 | 5.02 | 1.39 | 3.7 |
| 28 | 20.48 | 5.05 | 1.36 | 5.4 | 20 | 20.48 | 5.04 | 1.37 | 4.6 |
| 55 | 20.47 | 4.94 | 1.36 | 4.0 | 30 | 20.48 | 5.05 | 1.36 | 5.7 |
| 82 | 15.48 | 0.37 | 2.60 | 13.9 | 50 | 20.48 | 5.00 | 1.36 | 8.7 |
| 110 | 13.85 | 0.38 | 2.60 | 19.6 | 75 | 16.50 | 0.45 | 2.60 | 13 |
| 161 | 13.20 | 0.48 | 2.60 | 22.1 | 100 | 14.20 | 0.36 | 2.60 | 18 |
| 212 | 12.42 | 0.19 | 2.75b) | 25.7 | 150 | 13.36 | 0.47 | 2.60 | 22 |
| 263 | 11.89 | 0.32 | 2.76 | 27.2 | 200 | 12.62 | 0.26 | 2.72 | 25 |
| 316 | 11.33 | 0.48 | 2.85 | 28.4 | 250 | 11.99 | 0.26 | 2.78 | 27 |
| 417 | 9.67 | 0.47 | 3.00 | 35.6 | 300 | 11.52 | 0.45 | 2.82 | 28 |
| 523 | 7.89 | 0.23 | 3.22 | 45.0 | 400 | 9.99 | 0.47 | 2.97 | 34 |
| 695 | 6.59 | 0.29 | 3.26 | 54.7 | 500 | 8.18 | 0.27 | 3.19 | 43 |
| 833 | 5.25 | 0.67 | 3.30 | 74.9 | 600 | 7.30 | 0.25 | 3.25 | 50 |
| 1037 | 4.33 | 1.24 | 3.33 | 89.8 | 700 | 6.53 | 0.30 | 3.26 | 55 |
| 1234 | 3.66 | 1.69 | 3.24 | 106.6 | 800 | 5.51 | 0.57 | 3.29 | 71 |
| | | | | | 1000 | 4.50 | 1.15 | 3.32 | 87 |
| | | | | | 1200 | 3.75 | 1.61 | 3.26 | 103 |

117 HORIZON; July 12, 1952; 0540 GCT; 8°58.5'S, 83°37'W; sounding, 2420 fm; wind, 140°, force 5; weather, partly cloudy; sea, very rough; wire angle, 22°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.48 | 4.91 | | | 0 | 19.48 | 4.91 | | |
| 10 | 19.48 | 4.93 | | | 10 | 19.48 | 4.93 | | |
| 28 | 19.46 | 4.88 | | | 20 | 19.47 | 4.92 | | |
| 55 | 15.82 | 0.51 | | | 30 | 19.46 | 4.77 | | |
| 81 | 13.94 | 0.20 | | | 50 | 17.95 | 0.90 | | |
| 107 | 13.30 | 0.23 | | | 75 | 14.15 | 0.21 | | |
| 163 | 12.86 | 0.21 | | | 100 | 13.43 | 0.23 | | |
| 212 | 12.35 | 0.29 | | | 150 | 12.92 | 0.21 | | |
| 263 | 11.91 | 0.29 | | | 200 | 12.44 | 0.28 | | |
| 311 | 11.21 | 0.21 | | | 250 | 12.03 | 0.30 | | |
| 402 | 9.54 | 0.13 | | | 300 | 11.39 | 0.23 | | |
| 499 | 7.75 | 0.19 | | | 400 | 9.59 | 0.13 | | |
| 594 | 6.70 | 0.21 | | | 500 | 7.74 | 0.19 | | |
| 802 | 5.48 | 0.58 | | | 600 | 6.65 | 0.21 | | |
| 1017 | 4.54 | 1.13 | | | 700 | 6.00 | 0.36 | | |
| 1227 | 3.86 | 1.55 | | | 800 | 5.48 | 0.57 | | |
| | | | | | 1000 | 4.63 | 1.09 | | |
| | | | | | 1200 | 3.94 | 1.50 | | |



a) Alternate value, 1.50 µg at/L, not used in interpolation.
b) Alternate value, 2.82 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 12, 1952; 1140, 1237 GCT; 8°49'S, 83°02.5'W; sounding, 2450 fm; wind, 120°, force 5; weather, overcast; sea, very rough; wire angle, 30°, 36°. 118

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.87 | 4.84 | 1.86 | 2.3 | 0 | 17.87 | 4.84 | 1.86 | 2.3 |
| 8 | 17.89 | 4.91 | 1.80 | 7.4 | 10 | 17.89 | 4.91 | 1.80 | 7.4 |
| 26 | 17.88 | 4.91 | 1.80 | 7.4 | 20 | 17.88 | 4.91 | 1.80 | 7.4 |
| 51 | 16.36 | 1.60 | 2.36 | 12.4 | 30 | 17.82 | 4.87 | 1.81 | 7.6 |
| 74 | 14.11 | 0.20 | 2.68 | 17.3 | 50 | 16.67 | 1.80 | 2.32 | 12.3 |
| 97 | 13.49 | 0.24 | 2.72 | 21.4 | 75 | 14.10 | 0.20 | 2.68 | 17 |
| 144 | 12.98 | 0.35 | 2.75 | 23.9 | 100 | 13.44 | 0.25 | 2.72 | 21 |
| 189 | 12.50 | 0.15 | 2.81 | 27.2 | 150 | 12.93 | 0.34 | 2.76 | 24 |
| | | | | | 200 | 12.37 | 0.15 | 2.81 | 27 |
| 230 | 12.06 | 0.20 | 2.80a) | 28.1 | 250 | 11.80 | 0.21 | 2.82 | 29 |
| 273 | 11.46 | 0.22 | 2.86b) | 30.2 | 300 | 11.12 | 0.20 | 2.90 | 31 |
| 362 | 10.26 | 0.15 | 2.99c) | 34.6 | 400 | 9.55 | 0.16 | 3.07 | 38 |
| 456 | 8.48 | 0.18 | 3.20 | 42.8 | 500 | 7.74 | 0.20 | 3.22 | 48 |
| 548 | 7.08 | 0.21 | 3.22 | 53.8 | 600 | 6.65 | 0.23 | 3.24 | 59 |
| 733 | 5.80 | 0.37 | 3.31 | 69.3 | 700 | 5.99 | 0.31 | 3.30 | 67 |
| 917 | 4.88 | 0.99 | 3.28 | 82.1 | 800 | 5.43 | 0.59 | 3.31 | 74 |
| 1115 | 4.12 | 1.44 | 3.20 | 98.6 | 1000 | 4.54 | 1.19 | 3.25 | 89 |

HORIZON; July 12, 1952; 1836 GCT; 8°38'S, 82°22.5'W; sounding, 2430 fm; wind, 130°, force 5; weather, cloudy; sea, high; wire angle, 30°. 119

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 17.46 | 4.55 | 0 | 17.46 | 4.55 | |
| 8 | 17.44 | 4.49 | 10 | 17.44 | 4.50 | |
| 24 | 17.35 | 4.50 | 20 | 17.38 | 4.50 | |
| 48 | 15.76 | 1.26 | 30 | 17.34 | 3.30 | |
| 72 | 14.44 | 0.74 | 50 | 16.05 | 1.22 | |
| 96 | 14.06 | 0.79 | 75 | 14.40 | 0.70 | |
| 143 | 13.21 | 0.23 | 100 | 13.96 | 0.44 | |
| 197 | 12.67 | 0.21 | 150 | 13.14 | 0.24 | |
| 241 | 12.09 | 0.20 | 200 | 12.58 | 0.20 | |
| 289 | 11.49 | 0.19 | 250 | 11.99 | 0.20 | |
| 383 | 10.18 | 0.20 | 300 | 11.33 | 0.20 | |
| 481 | 8.20 | 0.20 | 400 | 9.81 | 0.20 | |
| 576 | 7.24 | 0.16 | 500 | 8.00 | 0.19 | |
| 773 | 5.66 | 0.54 | 600 | 7.01 | 0.18 | |
| 973 | 4.64 | 1.09 | 700 | 6.16 | 0.35 | |
| 1174 | 3.96 | 1.47 | 800 | 5.50 | 0.63 | |
| | | | 1000 | 4.54 | 1.14 | |

a) Alternate value, 2.68 µg at/L, not used in interpolation.
b) Alternate value, 2.74 µg at/L, not used in interpolation.
c) Alternate value, 2.92 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 120 | HORIZON; July 13, 1952; 0025 GCT; 8°35'S, 81°47'W; sounding, 2630 fm; wind, 130°, force 5; weather, overcast; sea, very rough; wire angle, 24°. | | | | | | | | |
| 0 | 17.08 | 4.60 | 1.86 | | 0 | 17.08 | 4.60 | 1.86 | |
| 9 | 17.08 | 4.62 | 1.88 | | 10 | 17.08 | 4.62 | 1.88 | |
| 27 | 17.09 | 4.59 | 1.90 | | 20 | 17.09 | 4.60 | 1.89 | |
| 52 | 17.06 | 4.48 | 1.94 | | 30 | 17.09 | 4.57 | 1.90 | |
| 78 | 15.46 | 1.15 | 2.35a) | | 50 | 17.06 | 4.50 | 1.94 | |
| 104 | 14.76 | 0.87 | 2.46 | | 75 | 15.60 | 1.27 | 2.40 | |
| 154 | 13.81 | 0.66 | 2.56 | | 100 | 14.86 | 0.90 | 2.46 | |
| 207 | 13.10 | 0.21 | 2.77 | | 150 | 13.90 | 0.69 | 2.55 | |
| 263 | 12.56 | 0.27 | 2.78 | | 200 | 13.17 | 0.23 | 2.74 | |
| 312 | 11.68 | 0.13 | 2.98 | | 250 | 12.73 | 0.27 | 2.78 | |
| 413 | 9.74 | 0.14 | 3.16 | | 300 | 11.89 | 0.15 | 2.92 | |
| 519 | 7.99 | 0.16 | 3.32 | | 400 | 10.00 | 0.14 | 3.14 | |
| 622 | 6.78 | 0.12 | 3.44b) | | 500 | 8.27 | 0.16 | 3.29 | |
| 835 | 5.46 | 0.64 | 3.42c) | | 600 | 6.99 | 0.13 | 3.42 | |
| 1043 | 4.48 | 1.13 | 3.42 | | 700 | 6.23 | 0.27 | 3.45 | |
| 1245 | 3.69 | 0.55u | 3.45d) | | 800 | 5.65 | 0.54 | 3.46 | |
| | | | | | 1000 | 4.67 | 1.05 | 3.43 | |
| | | | | | 1200 | 3.85 | | 3.44 | |
| 121 | HORIZON; July 13, 1952; 0810 GCT; 8°27.5'S, 81°13'W; sounding, 2960 fm; wind, 130°, force 5; weather, overcast; sea, very rough; wire angle, 27°. | | | | | | | | |
| 0 | 17.30 | 4.56 | | | 0 | 17.30 | 4.56 | | |
| 8 | 17.31 | 4.62 | | | 10 | 17.31 | 4.62 | | |
| 26 | 17.30 | 4.61 | | | 20 | 17.30 | 4.62 | | |
| 52 | 16.69 | 3.54 | | | 30 | 17.29 | 4.58 | | |
| 78 | 15.45 | 1.29 | | | 50 | 16.78 | 3.63 | | |
| 104 | 14.96 | 1.43 | | | 75 | 15.58 | 1.32 | | |
| 154 | 13.72 | 0.37 | | | 100 | 15.02 | 1.42 | | |
| 203 | 12.73 | 0.15 | | | 150 | 13.82 | 0.41 | | |
| | | | | | 200 | 12.79 | 0.15 | | |
| 122 | HORIZON; July 13, 1952; 1433 GCT; 8°20'S, 80°37'W; sounding, 730 fm; wind, 150°, force 5; weather, cloudy; sea, high; wire angle, 30°. | | | | | | | | |
| 0 | 17.27 | 4.49 | 1.94 | 7.6 | 0 | 17.27 | 4.49 | 1.94 | 7.6 |
| 8 | 17.26 | 4.47 | 1.92 | 7.7 | 10 | 17.26 | 4.47 | 1.92 | 7.8 |
| 25 | 17.27 | 4.49 | 1.98 | 8.3 | 20 | 17.27 | 4.49 | 1.96 | 8.0 |
| 48 | 17.00 | 4.05 | 2.00 | 8.6 | 30 | 17.25 | 4.49 | 1.99 | 8.5 |
| 70 | 15.74 | 1.03 | 2.33 | 14.6 | 50 | 16.93 | 3.95 | 2.00 | 8.8 |
| 93 | 14.84 | 1.39 | 2.26 | 15.1 | 75 | 15.50 | 0.96 | 2.33 | 14.9 |
| 138 | 13.92 | 0.55 | 2.58 | 19.4 | 100 | 14.68 | 0.76 | 2.27 | 15.3 |
| 184 | 13.16 | 0.34 | 2.69 | 23.8 | 150 | 13.69 | 0.49 | 2.61 | 21 |
| 229 | 12.60 | 0.24 | 2.82 | 26.1 | 200 | 12.99 | 0.31 | 2.74 | 24 |
| 274 | 11.44 | 0.13 | 2.91 | 30.6 | 250 | 12.10 | 0.19 | 2.86 | 28 |
| 359 | 9.42 | 0.17 | 3.18 | 37.3 | 300 | 10.78 | 0.13 | 2.99 | 33 |
| 446 | 7.90 | 0.24 | 3.30 | 46.4 | 400 | 8.56 | 0.21 | 3.25 | 41 |
| 532 | 7.10 | 0.24 | 3.39 | 52.4 | 500 | 7.38 | 0.24 | 3.36 | 50 |
| 709 | 5.76 | 0.54 | 3.34 | 71.3 | 600 | 6.53 | 0.33 | 3.38 | 60 |
| 894 | 4.92 | 0.97 | 3.33 | 82.4 | 700 | 5.83 | 0.52 | 3.35 | 70 |
| 1090 | 4.08 | 1.35 | 3.35 | 98.6 | 800 | 5.33 | 0.75 | 3.34 | 77 |
| | | | | | 1000 | 4.47 | 1.17 | 3.34 | 90 |

a) Alternate value, 2.42 µg at/L, not used in interpolation.
b) Alternate value, 3.60 µg at/L, not used in interpolation.
c) Alternate value, 3.49 µg at/L, not used in interpolation.
d) Alternate value, 3.58 µg at/L, not used in interpolation.

HORIZON; July 13, 1952; 2036 GCT; 8°46.5'S, 80°50.5'W; sounding, 3100 fm; wind, 140°, force 5; weather, partly cloudy; sea, very rough; wire angle, 27°. 123

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 17.48 | 4.80 | | | 0 | 17.48 | 4.80 | | |
| 9 | 17.49 | 4.80 | | | 10 | 17.49 | 4.80 | | |
| 27 | 17.46 | 4.83 | | | 20 | 17.47 | 4.83 | | |
| 53 | 16.24 | 2.06 | | | 30 | 17.45 | 4.79 | | |
| 79 | 15.14 | 1.00 | | | 50 | 17.30 | 2.50 | | |
| 105 | 14.73 | 1.12 | | | 75 | 15.20 | 1.04 | | |
| 155 | 14.06 | 0.68 | | | 100 | 14.80 | 0.86 | | |
| 207 | 13.24 | 0.37 | | | 150 | 14.13 | 0.71 | | |
| 258 | 12.54 | 0.20 | | | 200 | 13.33 | 0.41 | | |
| 308 | 11.44 | 0.20 | | | 250 | 12.65 | 0.22 | | |
| 406 | 8.81 | 0.19 | | | 300 | 11.70 | 0.20 | | |
| 507 | 7.50 | 0.20 | | | 400 | 8.92 | 0.19 | | |
| 605 | 6.50 | 0.23 | | | 500 | 7.57 | 0.20 | | |
| 807 | 5.30 | 0.71 | | | 600 | 6.55 | 0.23 | | |
| 1014 | 4.32 | 1.26 | | | 700 | 5.87 | 0.43 | | |
| 1208 | 3.66 | 1.62 | | | 800 | 5.33 | 0.68 | | |
| | | | | | 1000 | 4.39 | 1.24 | | |
| | | | | | 1200 | 3.67 | 1.60 | | |

HORIZON; July 14, 1952; 0448 GCT; 9°21'S, 81°12'W; sounding, 2750 fm; wind, 140°, force 6; weather, overcast; sea, very rough; wire angle, 28°. 124

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 17.41 | 4.78 | 1.99 | | 0 | 17.41 | 4.78 | 1.99 | |
| 8 | 17.40 | 4.79 | 2.00 | | 10 | 17.40 | 4.80 | 2.00 | |
| 26 | 17.42 | 4.88 | 2.00a) | | 20 | 17.41 | 4.87 | 2.00 | |
| 52 | 17.31 | 4.70 | 2.02 | | 30 | 17.41 | 4.87 | 2.00 | |
| 78 | 15.06 | 0.23 | 2.74 | | 50 | 17.33 | 4.74 | 2.02 | |
| 104 | 14.07 | 0.13 | 2.76 | | 75 | 15.35 | 0.50 | 2.72 | |
| 155 | 13.07 | 0.17 | 2.90 | | 100 | 14.17 | 0.14 | 2.76 | |
| 206 | 12.64 | 0.16 | 3.04 | | 150 | 13.14 | 0.16 | 2.88 | |
| 257 | 12.18 | 0.17 | 3.06b) | | 200 | 12.70 | 0.16 | 3.02 | |
| 308 | 11.58 | 0.12 | 3.06 | | 250 | 12.24 | 0.17 | 3.10 | |
| 409 | 10.06 | 0.17 | 3.17 | | 300 | 11.66 | 0.13 | 3.10 | |
| 512 | 8.04 | 0.38 | 3.38 | | 400 | 10.20 | 0.15 | 3.06 | |
| 610 | 6.68 | 0.20 | 3.45c) | | 500 | 8.29 | 0.37 | 3.15 | |
| 813 | 5.18 | 0.72 | 3.46 | | 600 | 6.78 | 0.22 | 3.36 | |
| 1016 | 4.37 | 1.21 | 3.37 | | 700 | 5.91 | 0.40 | 3.42 | |
| 1215 | 3.68 | 1.57 | 3.33 | | 800 | 5.25 | 0.68 | 3.45 | |
| | | | | | 1000 | 4.43 | 1.17 | 3.46 | |
| | | | | | 1200 | 3.73 | 1.55 | 3.38 | |

HORIZON; July 14, 1952; 1142 GCT; 9°52.5'S, 81°32'W; sounding, 2600 fm; wind, 140°, force 5; weather, overcast; sea, very rough; wire angle, 30°. 125

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 17.49 | 4.53 | | | 0 | 17.49 | 4.53 | | |
| 8 | 17.50 | 4.58 | | | 10 | 17.50 | 4.59 | | |
| 25 | 17.50 | 4.63 | | | 20 | 17.50 | 4.62 | | |
| 50 | 17.48 | 4.52 | | | 30 | 17.50 | 4.62 | | |
| 74 | 14.76 | 0.18 | | | 50 | 17.48 | 4.52 | | |
| 98 | 13.78 | 0.21 | | | 75 | 14.70 | 0.18 | | |
| 146 | 12.95 | 0.15 | | | 100 | 13.70 | 0.21 | | |
| 192 | 12.41 | 0.20 | | | 150 | 12.89 | 0.15 | | |
| 239 | 12.00 | 0.13 | | | 200 | 12.34 | 0.19 | | |
| 288 | 11.51 | 0.18 | | | 250 | 11.79 | 0.14 | | |
| 379 | 10.06 | 0.15 | | | 300 | 11.35 | 0.18 | | |
| 474 | 8.42 | 0.22 | | | 400 | 9.67 | 0.16 | | |
| 566 | 7.20 | 0.25 | | | 500 | 8.05 | 0.23 | | |
| 762 | 5.64 | 0.43 | | | 600 | 6.87 | 0.27 | | |
| 956 | 4.52 | 1.11 | | | 700 | 6.08 | 0.33 | | |
| 1151 | 3.88 | 1.50 | | | 800 | 5.40 | 0.56 | | |
| | | | | | 1000 | 4.34 | 1.21 | | |

a) Mean value of 1.94 and 2.06 µg at/L.
b) Mean value of 3.02 and 3.11 µg at/L.
c) Alternate value, 3.37 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 126 | HORIZON; July 14, 1952; 1811, 1905 GCT; 10°26'S, 81°53'W; sounding, 1811 fm; wind, 140°, force 5; weather, partly cloudy; sea, very rough; wire angle, 27°, 30°. | | | | | | | | |
| 0 | 19.10 | 5.04 | 1.69a) | 2.9 | 0 | 19.10 | 5.04 | 1.69 | 2.9 |
| 8 | 19.09 | 5.01 | 1.64 | 2.9 | 10 | 19.09 | 5.03 | 1.64 | 3.0 |
| 25 | 19.08 | 5.02 | 1.64 | 3.8 | 20 | 19.08 | 5.03 | 1.64 | 3.3 |
| 50 | 19.08 | 4.99 | 1.69 | 5.0 | 30 | 19.08 | 5.03 | 1.65 | 4.0 |
| 74 | 15.68 | 0.62 | 2.78 | 13.1 | 50 | 19.08 | 5.03 | 1.69 | 5.0 |
| 99 | 13.88 | 0.14 | 3.14 | 23.8 | 75 | 15.55 | 0.55 | 2.79 | 13.8 |
| 148 | 12.78 | 0.15 | 3.11 | 27.2 | 100 | 13.83 | 0.14 | 3.14 | 24 |
| 198 | 12.16 | 0.26 | 3.00b) | 28.3 | 150 | 12.75 | 0.15 | 3.11 | 27 |
| | | | | | 200 | 12.13 | 0.26 | 2.99 | 28 |
| 241 | 11.62 | 0.20 | 2.91 | 30.4 | 250 | 11.54 | 0.19 | 2.92 | 30 |
| 293 | 11.10 | 0.15 | 2.96 | 31.7 | 300 | 11.02 | 0.15 | 2.97 | 32 |
| 387 | 9.66 | 0.19 | 3.12 | 36.9 | 400 | 9.45 | 0.23 | 3.14 | 37 |
| 488 | 8.19 | 0.29 | 3.24 | 42.1 | 500 | 8.05 | 0.28 | 3.25 | 43 |
| 585 | 7.10 | 0.24 | 3.32 | 56.0 | 600 | 6.95 | 0.25 | 3.34 | 58 |
| 782 | 5.46 | 0.67 | 3.49 | 73.8 | 700 | 6.02 | 0.50 | 3.43 | 67 |
| 980 | 4.50 | 1.08 | 3.45 | 86.6 | 800 | 5.36 | 0.73 | 3.49 | 75 |
| 1174 | 3.71 | 1.61 | 3.39 | 106.6 | 1000 | 4.43 | 1.14 | 3.44 | 89 |
| 127 | HORIZON; July 15, 1952; 0138 GCT; 10°38'S, 81°15'W; sounding, 2330 fm; wind, 130°, force 5; weather, cloudy; sea, very rough; wire angle, 25°. | | | | | | | | |
| 0 | 19.04 | 4.94 | | | 0 | 19.04 | 4.94 | | |
| 8 | 19.04 | 4.96 | | | 10 | 19.04 | 4.96 | | |
| 26 | 19.04 | 4.99 | | | 20 | 19.04 | 4.98 | | |
| 51 | 19.04 | 4.98 | | | 30 | 19.04 | 4.99 | | |
| 76 | 15.06 | 1.17 | | | 50 | 19.04 | 4.98 | | |
| 101 | 13.48 | 0.18 | | | 75 | 15.17 | 1.20 | | |
| 150 | 12.64 | 0.21 | | | 100 | 13.54 | 0.19 | | |
| 201 | 12.28 | 0.20 | | | 150 | 12.64 | 0.21 | | |
| 253 | 11.74 | 0.20 | | | 200 | 12.28 | 0.20 | | |
| 305 | 11.06 | 0.15 | | | 250 | 11.77 | 0.20 | | |
| 406 | 9.35 | 0.21 | | | 300 | 11.14 | 0.15 | | |
| 513 | 7.82 | 0.31 | | | 400 | 9.45 | 0.20 | | |
| 613 | 6.74 | 0.25 | | | 500 | 8.00 | 0.30 | | |
| 819 | 5.06 | 0.82 | | | 600 | 6.89 | 0.26 | | |
| 1021 | 4.30 | 1.30 | | | 700 | 5.89 | 0.47 | | |
| 1220 | 3.64 | 1.64 | | | 800 | 5.15 | 0.79 | | |
| | | | | | 1000 | 4.37 | 1.24 | | |
| | | | | | 1200 | 3.71 | 1.62 | | |
| 128 | HORIZON; July 15, 1952; 0850 GCT; 10°49'S, 80°38'W; sounding, 2570 fm; wind, 140°, force 5; weather, overcast; sea, rough; wire angle, 25°. | | | | | | | | |
| 0 | 17.94 | 4.83 | 1.83 | | 0 | 17.94 | 4.83 | 1.83 | |
| 6 | 17.92 | 4.90 | 1.80 | | 10 | 17.93 | 4.89 | 1.80 | |
| 21 | 17.93 | 4.86 | 1.80 | | 20 | 17.93 | 4.86 | 1.80 | |
| 40 | 17.12 | 4.27 | 2.08 | | 30 | 17.75 | 4.70 | 1.85 | |
| 58 | 15.10 | 0.73 | 2.68 | | 50 | 16.47 | 2.45 | 2.43 | |
| 78 | 13.48 | 0.10 | 2.96 | | 75 | 13.55 | 0.12 | 2.94 | |
| 114 | 13.14 | 0.09 | 3.06 | | 100 | 13.27 | 0.10 | 3.03 | |
| 150 | 12.59 | 0.11 | 3.00 | | 150 | 12.59 | 0.11 | 3.00 | |
| 189 | 12.22 | 0.14 | 2.95 | | 200 | 12.07 | 0.14 | 2.96 | |
| 224 | 11.77 | 0.11 | 3.01c) | | 250 | 11.38 | 0.10 | 3.07 | |
| 293 | 10.67 | 0.09 | 3.17 | | 300 | 10.53 | 0.09 | 3.18 | |
| 364 | 9.26 | 0.09 | 3.25 | | 400 | 8.66 | 0.12 | (3.29) | |
| 438 | 8.10 | 0.13 | 3.32d) | | 500 | 7.37 | 0.17 | (3.38) | |
| 588 | 6.44 | 0.24 | 3.42e) | | 600 | 6.34 | 0.26 | (3.42) | |
| 742 | 5.40 | 0.48 | 3.44 | | 700 | 5.64 | 0.39 | (3.44) | |
| 896 | 4.72 | 1.00 | 3.48 | | 800 | 5.14 | 0.66 | 3.45 | |

a) Alternate value, 1.78 µg at/L, not used in interpolation.
b) Alternate value, 2.90 µg at/L, not used in interpolation.
c) Alternate value, 3.11 µg at/L, not used in interpolation.
d) Alternate value, 3.42 µg at/L, not used in interpolation.
e) Alternate value, 3.50 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 15, 1952; 1528 GCT; 10°59'S, 80°01'W; sounding, 2830 fm; wind, 130°, force 5; weather, overcast; sea, very rough; wire angle, 28°. 129

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.72 | 4.37 | | | 0 | 16.72 | 4.37 | | |
| 9 | 16.70 | 4.30 | | | 10 | 16.70 | 4.31 | | |
| 26 | 16.70 | 4.28 | | | 20 | 16.70 | 4.35 | | |
| 52 | 14.53 | 0.19 | | | 30 | 16.67 | 4.34 | | |
| 77 | 14.16 | 0.39 | | | 50 | 15.75 | 0.60 | | |
| 103 | 13.54 | 0.10 | | | 75 | 14.18 | 0.19 | | |
| 152 | 12.92 | 0.09 | | | 100 | 13.11 | 0.12 | | |
| 200 | 12.33 | 0.09 | | | 150 | 12.95 | 0.09 | | |
| 247 | 11.13 | 0.11 | | | 200 | 12.33 | 0.09 | | |
| 294 | 10.45 | 0.09 | | | 250 | 11.09 | 0.11 | | |
| 383 | 9.10 | 0.09 | | | 300 | 10.37 | 0.09 | | |
| 478 | 7.70 | 0.22 | | | 400 | 8.84 | 0.12 | | |
| 570 | 6.80 | 0.24 | | | 500 | 7.46 | 0.23 | | |
| 760 | 5.50 | 0.46 | | | 600 | 6.55 | 0.27 | | |
| 949 | 4.62 | 1.03 | | | 700 | 5.85 | 0.35 | | |
| 1150 | 3.82 | 1.45 | | | 800 | 5.30 | 0.57 | | |
| | | | | | 1000 | 4.42 | 1.15 | | |

HORIZON; July 15, 1952; 2202 GCT; 11°16'S, 79°20'W; sounding, 3150 fm; wind, 150°, force 4; weather, cloudy; sea, very rough; wire angle, 15°. 130

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.48 | 4.65 | 1.91 | 6.7 | 0 | 17.48 | 4.65 | 1.91 | 6.7 |
| 9 | 17.48 | 4.69 | 1.84 | 5.8 | 10 | 17.48 | 4.69 | 1.84 | 5.9 |
| 28 | 15.08 | 0.86 | 2.61 | 13.9 | 20 | 17.45 | 1.20 | 2.50 | 10.0 |
| 55 | 14.39 | 0.73 | 2.42 | 19.1 | 30 | 14.85 | 0.85 | 2.61 | 14.0 |
| 82 | 14.08 | 0.53 | 2.52 | 21.6 | 50 | 14.46 | 0.76 | 2.43 | 18.2 |
| 109 | 13.77 | 0.28 | 2.61 | 22.9 | 75 | 14.15 | 0.59 | 2.49 | 21 |
| 163 | 12.48 | 0.16 | 2.90 | 29.3 | 100 | 13.89 | 0.36 | 2.58 | 23 |
| 216 | 11.80 | 0.13 | 2.92 | 29.5 | 150 | 12.74 | 0.18 | 2.83 | 27 |
| 271 | 11.13 | 0.14 | 3.05 | 31.9 | 200 | 12.00 | 0.13 | 2.91 | 29 |
| 325 | 10.24 | 0.11 | 3.19 | 34.2 | 250 | 11.40 | 0.14 | 2.99 | 31 |
| 429 | 8.29 | 0.19 | 3.30 | 40.7 | 300 | 10.69 | 0.13 | 3.13 | 33 |
| 534 | 7.14 | 0.11 | 3.35 | 49.9 | 400 | 8.80 | 0.18 | 3.28 | 39 |
| 635 | 6.66 | 0.29 | 3.34 | 56.3 | 500 | 7.44 | 0.12 | 3.34 | 47 |
| 842 | 5.14 | 0.66 | 3.40 | 77.6 | 600 | 6.84 | 0.22 | 3.34 | 54 |
| 1044 | 4.18 | 1.34 | 3.35 | 103.1 | 700 | 6.16 | 0.39 | 3.36 | 62 |
| 1240 | 3.49 | 1.65 | 3.28 | 72.2u | 800 | 5.43 | 0.56 | 3.39 | 73 |
| | | | | | 1000 | 4.36 | 1.20 | 3.36 | 97 |
| | | | | | 1200 | 3.61 | 1.60 | 3.29 | |

HORIZON; July 16, 1952; 0338 GCT; 11°32'S, 78°41'W; sounding, 1410 fm; wind, 140°, force 4; weather, partly cloudy; sea, very rough; wire angle, 28°. 131

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.80 | 4.71 | | | 0 | 16.80 | 4.71 | | |
| 8 | 16.80 | 4.71 | | | 10 | 16.80 | 4.70 | | |
| 25 | 16.80 | 4.38 | | | 20 | 16.80 | 4.53 | | |
| 50 | 16.30 | 3.69 | | | 30 | 16.80 | 4.29 | | |
| 72 | 14.30 | 0.25 | | | 50 | 16.30 | 3.69 | | |
| 99 | 13.51 | 0.15 | | | 75 | 14.18 | 0.22 | | |
| 147 | 12.59 | 0.17 | | | 100 | 13.50 | 0.15 | | |
| 195 | 12.00 | 0.17 | | | 150 | 12.54 | 0.17 | | |
| 243 | 11.47 | 0.18 | | | 200 | 11.95 | 0.18 | | |
| 290 | 10.82 | 0.12 | | | 250 | 11.38 | 0.17 | | |
| 382 | 9.20 | 0.19 | | | 300 | 10.66 | 0.13 | | |
| 476 | 7.62 | 0.33 | | | 400 | 8.86 | 0.23 | | |
| 570 | 6.60 | 0.29 | | | 500 | 7.30 | 0.32 | | |
| 765 | 5.40 | 0.52 | | | 600 | 6.37 | 0.29 | | |
| 957 | 4.54 | 1.12 | | | 700 | 5.75 | 0.35 | | |
| 1151 | 3.87 | 1.51 | | | 800 | 5.23 | 0.61 | | |
| | | | | | 1000 | 4.39 | 1.22 | | |

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 132 | HORIZON; July 20, 1952; 2352 GCT; 12°24'S, 77°54'W; sounding, 800 fm; wind, 140°, force 5; weather, overcast; sea, very rough; wire angle, 30°. | | | | | | | | |
| 0 | 16.02 | 4.72 | | 7.6 | 0 | 16.02 | 4.72 | | 7.6 |
| 8 | 15.99 | 4.72 | | 7.6 | 10 | 15.99 | 4.73 | | 7.7 |
| 25 | 16.00 | 4.75 | | 8.1 | 20 | 16.00 | 4.74 | | 7.9 |
| 50 | 13.64 | 0.21 | | 18.2 | 30 | 15.97 | 4.35 | | 9.5 |
| 74 | 12.90 | 0.12 | | 30.4 | 50 | 13.64 | 0.21 | | 18.2 |
| 99 | 12.63 | 0.11 | | 34.2 | 75 | 12.88 | 0.12 | | 30.5 |
| 146 | 12.31 | 0.15 | | 29.5 | 100 | 12.62 | 0.11 | | 34.2 |
| 192 | 11.91 | 0.13 | | 33.3 | 150 | 12.26 | 0.14 | | 29.5 |
| 243 | 11.49 | 0.11 | | 34.4 | 200 | 11.85 | 0.12 | | 35 |
| 291 | 10.80 | 0.12 | | 36.0 | 250 | 11.40 | 0.11 | | 38 |
| 386 | 9.16 | 0.14 | | 38.3 | 300 | 10.66 | 0.12 | | 36 |
| 486 | 7.76 | 0.24 | | 45.2 | 400 | 8.93 | 0.16 | | 40 |
| 585 | 6.67 | 0.26 | | 58.3 | 500 | 7.60 | 0.25 | | 47 |
| 133 | HORIZON; July 21, 1952; 0544, 0617 GCT; 12°38'S, 78°29'W; sounding, 3100 fm; wind, 130°, force 5; weather, overcast; sea, very rough; wire angle, 25°, 30°. | | | | | | | | |
| 0 | 15.95 | 4.84 | | | 0 | 15.95 | 4.84 | | |
| 9 | 15.93 | 4.89 | | | 10 | 15.93 | 4.90 | | |
| 26 | 15.94 | 4.93 | | | 20 | 15.94 | 4.93 | | |
| 52 | 15.94 | 4.89 | | | 30 | 15.94 | 4.92 | | |
| 78 | 15.75 | 4.08 | | | 50 | 15.94 | 4.90 | | |
| 103 | 13.65 | 0.66 | | | 75 | 15.78 | 4.35 | | |
| 151 | 12.42 | 0.18 | | | 100 | 13.93 | 0.73 | | |
| 199 | 11.96 | 0.14 | | | 150 | 12.46 | 0.19 | | |
| 249 | 11.43 | 0.16 | | | 200 | 11.94 | 0.14 | | |
| 296 | 10.81 | 0.15 | | | 250 | 11.43 | 0.16 | | |
| 392 | 9.32 | 0.20 | | | 300 | 10.75 | 0.15 | | |
| | | | | | 400 | 9.17 | 0.20 | | |
| 427 | 8.52 | 0.23 | | | 500 | 7.40 | 0.37 | | |
| 519 | 7.20 | 0.41 | | | 600 | 6.54 | 0.40 | | |
| 706 | 5.77 | 0.47 | | | 700 | 5.82 | 0.46 | | |
| 894 | 4.72 | 0.96 | | | 800 | 5.22 | 0.70 | | |
| 1087 | 3.94 | 1.46 | | | 1000 | 4.22 | 0.98 | | |

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 21, 1952; 1144, 1341 GCT; 12°52.5'S, 79°05'W; sounding, 2560 fm; wind, 140°, force 6; weather, overcast; sea, very rough; wire angle, 34°, 26°. 134

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.19 | 5.09 | 1.56 | 12.8 | 0 | 17.19 | 5.09 | 1.56 | 12.6 |
| 8 | 17.19 | 5.08 | 1.58 | 4.3 | 10 | 17.19 | 5.08 | 1.58 | 4.1 |
| 24 | 17.21 | 5.09 | 1.57 | 2.9 | 20 | 17.21 | 5.09 | 1.57 | 3.0 |
| 34 | 17.20 | 5.10 | 1.62 | 5.6 | 30 | 17.21 | 5.10 | 1.59 | 4.8 |
| 55 | 17.20 | 5.04 | 1.66 | 4.1 | 50 | 17.20 | 5.05 | 1.65 | 4.5 |
| 75 | 17.12 | 4.89 | 1.68 | 5.6 | 75 | 17.12 | 4.89 | 1.68 | 5.6 |
| 93 | 13.90 | 0.62 | 2.48 | 15.1 | 100 | 13.68 | 0.38 | 2.56 | 18.0 |
| 139 | 12.84 | 0.15 | 2.70 | 27.9 | 150 | 12.69 | 0.14 | 2.71 | 29 |
| 185 | 12.26 | 0.14 | 2.72 | 29.5 | 200 | 12.11 | 0.14 | 2.71 | 30 |
| 231 | 11.71 | 0.14 | 2.67 | 30.4 | 250 | 11.34 | 0.15 | 2.68 | 31 |
| 277 | 10.76 | 0.17 | 2.72 | 31.7 | 300 | 10.38 | 0.16 | 2.77 | 33 |
| 367 | 9.44 | 0.15 | 2.82 | 34.2 | 400 | 8.95 | 0.18 | 2.90 | 37 |
| 382 | 9.18 | 0.17 | 2.87 | 36.0 | 500 | 7.64 | 0.28 | 3.03 | 42 |
| 564 | 6.94 | 0.33 | 2.93 | 45.0 | 600 | 6.56 | 0.33 | 3.14 | 52 |
| | | | | | 700 | 5.74 | 0.50 | 3.16 | 62 |
| 324a) | 10.24 | 0.14 | 2.76b) | 34.0 | 800 | 5.22 | 0.71 | 3.16 | 69 |
| 596 | 6.60 | 0.32 | 3.18c) | 51.8 | 1000 | 4.35 | 1.24 | 3.13 | 87 |
| 801 | 5.22 | 0.71 | 3.16 | 69.3 | 1200 | 3.67 | 1.59 | 3.01 | 102 |
| 906 | 4.72 | 0.98 | 3.24d) | 79.9 | 1500 | 2.93 | 1.97 | 2.87 | 119 |
| 955 | 4.54 | 1.15 | 3.23d) | 86.6 | 2000 | 2.26 | 2.37 | 2.75 | 139 |
| 1009 | 4.30 | 1.26 | 3.16e) | 87.3 | 2500 | 1.94 | 2.84 | 2.66 | 147 |
| 1057 | 4.14 | 1.42 | 3.12 | 92.0 | | | | | |
| 1112 | 3.96 | 1.44 | 3.10 | 95.4 | | | | | |
| 1214 | 3.64 | 1.61 | 2.99 | 103.5 | | | | | |
| 1533 | 2.86 | 2.00 | 2.86 | 120.8 | | | | | |
| 2092 | 2.18 | 2.44 | 2.74 | 142.0 | | | | | |
| 2687 | 1.84 | 3.02 | 2.61 | 147.8 | | | | | |

HORIZON; July 21, 1952; 1950 GCT; 13°08.5'S, 79°48'W; sounding, 2410 fm; wind, 150°, force 6; weather, cloudy; sea, high; wire angle, 25°. 135

| | | | | | |
|---|---|---|---|---|---|
| 0 | 17.00 | 5.19 | 0 | 17.00 | 5.19 |
| 8 | 16.98 | 5.21 | 10 | 16.97 | 5.20 |
| 26 | 16.88 | 5.14 | 20 | 16.92 | 5.15 |
| 52 | 16.75 | 5.14 | 30 | 16.86 | 5.14 |
| 78 | 14.12 | 0.60 | 50 | 16.76 | 5.14 |
| 104 | 13.45 | 0.15 | 75 | 14.22 | 1.40 |
| 155 | 12.70 | 0.19 | 100 | 13.55 | 0.15 |
| 206 | 12.16 | 0.17 | 150 | 12.76 | 0.18 |
| 256 | 11.66 | 0.16 | 200 | 12.22 | 0.17 |
| 306 | 10.87 | 0.13 | 250 | 11.74 | 0.16 |
| 402 | 9.35 | 0.23 | 300 | 10.95 | 0.13 |
| 503 | 7.62 | 0.39 | 400 | 9.40 | 0.23 |
| 601 | 6.56 | 0.60 | 500 | 7.68 | 0.38 |
| 801 | 5.08 | 0.77 | 600 | 6.58 | 0.60 |
| 996 | 4.26 | 1.30 | 700 | 5.76 | 0.67 |
| 1197 | 3.66 | 1.61 | 800 | 5.09 | 0.77 |
| | | | 1000 | 4.26 | 1.31 |
| | | | 1200 | (3.65) | (1.61) |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 2.70 and 2.81 µg at/L.
c) Alternate value, 3.10 µg at/L, not used in interpolation.
d) Alternate value, 3.15 µg at/L, not used in interpolation.
e) Alternate value, 3.08 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 136 | HORIZON; July 22, 1952; 0148, 0212, 0345 GCT; 13°26.5'S, 80°30'W; sounding, 2510 fm; wind, 120°, force 6; weather, drizzle; sea, very rough; wire angle, 18°, 22°, 06°. | | | | | | | | |
| 0 | 18.60 | 5.09 | 0.96 | 0 | 0 | 18.60 | 5.09 | 0.96 | 0 |
| 9 | 18.58 | 5.16 | 0.92 | 0 | 10 | 18.58 | 5.16 | 0.92 | 0 |
| 27 | 18.60 | 5.16 | 0.95 | 0.2 | 20 | 18.59 | 5.16 | 0.94 | 0.1 |
| 41 | 18.60 | 5.11 | 0.96 | 0.5 | 30 | 18.60 | 5.15 | 0.96 | 0.2 |
| 63 | 15.94 | 3.32 | 1.62 | 4.0 | 50 | 18.57 | 4.97 | 1.08 | 1.8 |
| 81 | 13.60 | 1.16 | 2.35 | 13.0 | 75 | 14.10 | 1.56 | 2.18 | 10.3 |
| 107 | 12.62 | 0.55 | 2.66 | 19.4 | 100 | 12.83 | 0.66 | 2.59 | 19 |
| 160 | 12.18 | 0.12 | 2.92a) | 28.3 | 150 | 12.24 | 0.16 | 2.90 | 27 |
| | | | | | 200 | 11.76 | 0.09 | 2.75 | 29 |
| 213 | 11.56 | 0.08 | 2.70 | 29.3 | 250 | 10.98 | 0.09 | 2.75 | 29 |
| 264 | 10.76 | 0.10 | 2.77 | 29.5 | 300 | 10.31 | 0.13 | 2.84 | 32 |
| 317 | 10.14 | 0.21 | 2.88 | 33.5 | 400 | 9.04 | 0.32 | 2.94 | 35 |
| 424 | 8.70 | 0.37 | 2.94 | 35.3 | 500 | 7.76 | 0.56 | 3.04 | 39 |
| 539 | 7.31 | 0.66 | 3.12 | 42.3 | 600 | 6.71 | 0.64 | 3.19 | 46 |
| 653 | 6.20 | 0.10 | 3.11 | 49.9 | 700 | 5.85 | 0.64 | 3.28 | 55 |
| | | | | | 800 | 5.23 | 0.80 | 3.34 | 68 |
| 342b) | 9.87 | 0.11 | 2.95 | 34.6 | 1000 | 4.29 | 1.33 | 3.35 | 86 |
| 635 | 6.46 | 0.61 | 3.22 | 47.9 | 1200 | 3.57 | 1.64 | 3.28 | 103 |
| 849 | 4.96 | 0.90 | 3.36 | 73.4 | 1500 | 2.90 | 1.96 | 3.09 | 124 |
| 960 | 4.44 | 1.26 | 3.39 | 82.1 | 2000 | 2.19 | 2.44 | 2.94 | 136 |
| 1011 | 4.24 | 1.33 | 3.33 | 87.3 | 2500 | 1.93 | 2.90 | 2.81 | 142 |
| 1070 | 4.01 | 1.51 | 3.26 | 89.8 | | | | | |
| 1121 | 3.88 | 1.46 | 3.26 | 96.1 | | | | | |
| 1178 | 3.64 | 1.59 | 3.28 | 101.5 | | | | | |
| 1288 | 3.30 | 1.78 | 3.18 | 109.3 | | | | | |
| 1630 | 2.68 | 2.04 | 3.06 | 130.7 | | | | | |
| 2230 | 2.04 | 2.71 | 2.84 | 138.1 | | | | | |
| 2833 | 1.88 | 3.03 | 2.80 | 148.3 | | | | | |
| 137 | HORIZON; July 22, 1952; 0911 GCT; 13°43.5'S, 81°08.5'W; sounding, 2630 fm; wind, 140°, force 4; weather, overcast; sea, rough; wire angle, 18°. | | | | | | | | |
| 0 | 18.38 | 5.17 | | | 0 | 18.38 | 5.17 | | |
| 10 | 18.38 | 5.18 | | | 10 | 18.38 | 5.18 | | |
| 28 | 18.37 | 5.15 | | | 20 | 18.37 | 5.17 | | |
| 55 | 18.34 | 5.15 | | | 30 | 18.36 | 5.15 | | |
| 83 | 14.30 | 1.75 | | | 50 | 18.34 | 5.15 | | |
| 110 | 13.10 | 0.64 | | | 75 | 15.22 | 3.00 | | |
| 164 | 12.11 | 0.14 | | | 100 | 13.43 | 1.94 | | |
| 216 | 11.60 | 0.15 | | | 150 | 12.30 | 0.21 | | |
| 270 | 10.90 | 0.15 | | | 200 | 11.77 | 0.14 | | |
| 322 | 10.21 | 0.13 | | | 250 | 11.16 | 0.15 | | |
| 422 | 8.57 | 0.24 | | | 300 | 10.53 | 0.14 | | |
| 530 | 7.19 | 0.42 | | | 400 | 8.97 | 0.21 | | |
| 634 | 6.32 | 0.55 | | | 500 | 7.53 | 0.37 | | |
| 848 | 5.03 | 0.88 | | | 600 | 6.60 | 0.50 | | |
| 1054 | 4.12 | 1.22 | | | 700 | 5.89 | 0.64 | | |
| 1251 | 3.48 | 1.76 | | | 800 | 5.30 | 0.80 | | |
| | | | | | 1000 | 4.34 | 1.11 | | |
| | | | | | 1200 | 3.64 | 1.63 | | |

a) Alternate value, 3.00 µg at/L, not used in interpolation.

b) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 22, 1952; 1448, 1615 GCT; 14°01'S, 81°47'W; sounding, 2680 fm; wind, 140°, force 4; weather, overcast; sea, rough; wire angle, 18°, 25°. 138

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.09 | 5.21 | 1.10 | 2.9 | 0 | 18.09 | 5.21 | 1.10 | 2.9 |
| 9 | 18.08 | 5.29 | 1.06 | 1.3 | 10 | 18.08 | 5.29 | 1.06 | 1.2 |
| 28 | 18.08 | 5.28 | 1.07 | 0.9 | 20 | 18.08 | 5.29 | 1.06 | 0.9 |
| 41 | 18.08 | 5.26 | 1.07 | 0.5 | 30 | 18.08 | 5.27 | 1.07 | 0.8 |
| 63 | 16.89 | 4.42 | 1.14 | 3.1 | 50 | 17.90 | 5.17 | 1.08 | 1.2 |
| 86 | 13.72 | 1.14 | 2.26 | 12.2 | 75 | 14.60 | 2.00 | 1.48 | 7.5 |
| 107 | 12.79 | 0.46 | 2.59 | 20.0 | 100 | 12.99 | 0.61 | 2.51 | 17.5 |
| 161 | 12.06 | 0.11 | 2.83 | 28.4 | 150 | 12.21 | 0.13 | 2.82 | 27 |
| 212 | 11.39 | 0.13 | 2.70 | 30.6 | 200 | 11.53 | 0.12 | 2.73 | 30 |
| 267 | 10.64 | 0.11 | 2.71 | 30.8 | 250 | 10.92 | 0.12 | 2.71 | 31 |
| 319 | 9.85 | 0.18 | 2.79 | 31.3 | 300 | 10.10 | 0.15 | 2.74 | 32 |
| 421 | 8.68 | 0.23 | 2.88 | 35.6 | 400 | 8.95 | 0.23 | 2.86 | 35 |
| 531 | 7.28 | 0.44 | 3.04a) | 42.1 | 500 | 7.66 | 0.40 | 2.97 | 40 |
| 641 | 6.20 | 0.51 | 3.10 | 51.8 | 600 | 6.58 | 0.49 | 3.02 | 51 |
| | | | | | 700 | 5.76 | 0.53 | 3.11 | 57 |
| 322b) | 9.98 | 0.20 | 2.74 | 32.9 | 800 | 5.22 | 0.71 | 3.11 | 69 |
| 594 | 6.54 | 0.48 | 3.02 | 50.2 | 1000 | 4.37 | 1.21 | 3.12 | 85 |
| 796 | 5.24 | 0.70 | 3.11 | 68.0 | 1200 | 3.70 | 1.64 | 3.01 | 102 |
| 896 | 4.80 | 0.98 | 3.09 | 77.2 | 1500 | 3.00 | 1.93 | 2.93 | 120 |
| 943 | 4.61 | 1.14 | 3.11c) | 81.9 | 2000 | 2.27 | 2.62 | 2.72 | 134 |
| 996 | 4.38 | 1.21 | 3.12 | 85.3 | 2500 | 1.88 | 2.97 | 2.59 | 141 |
| 1045 | 4.26 | 1.27 | 3.08 | 87.3 | | | | | |
| 1097 | 4.05 | 1.42 | 3.07d) | 90.2 | | | | | |
| 1197 | 3.72 | 1.63 | 2.88e) | 101.5 | | | | | |
| 1517 | 2.96 | 1.94 | 2.92f) | 120.8 | | | | | |
| 2087 | 2.18 | 2.72 | 2.69 | 135.5 | | | | | |
| 2674 | 1.84 | 3.05 | 2.56 | 142.9 | | | | | |

HORIZON; July 23, 1952; 0156 GCT; 14°09'S, 82°26'W; sounding, 2800 fm; wind, 090°, force 4; weather, overcast; sea, moderate; wire angle, 25°. 139

| | | | | | |
|---|---|---|---|---|---|
| 0 | 18.80 | 5.13 | 0 | 18.80 | 5.13 |
| 8 | 18.80 | 5.20 | 10 | 18.80 | 5.20 |
| 26 | 18.80 | 5.19 | 20 | 18.80 | 5.19 |
| 52 | 18.80 | 5.16 | 30 | 18.80 | 5.19 |
| 77 | 18.80 | 5.02 | 50 | 18.80 | 5.16 |
| 102 | 14.53 | 2.44 | 75 | 18.80 | 5.07 |
| 152 | 12.62 | 0.15 | 100 | 14.70 | 2.60 |
| 202 | 11.89 | 0.14 | 150 | 12.67 | 0.17 |
| 251 | 11.20 | 0.12 | 200 | 11.93 | 0.14 |
| 301 | 10.56 | 0.16 | 250 | 11.23 | 0.12 |
| 396 | 9.12 | 0.17 | 300 | 10.57 | 0.16 |
| 496 | 7.65 | 0.33 | 400 | 9.06 | 0.18 |
| 593 | 6.64 | 0.42 | 500 | 7.61 | 0.34 |
| 792 | 5.40 | 0.66 | 600 | 6.62 | 0.43 |
| 991 | 4.58 | 1.11 | 700 | 5.94 | 0.54 |
| 1185 | 3.88 | 1.56 | 800 | 5.36 | 0.66 |
| | | | 1000 | 4.55 | 0.97 |
| | | | 1200 | (3.83) | (1.62) |

a) Alternate value, 2.97 µg at/L, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.
c) Alternate value, 3.22 µg at/L, not used in interpolation.
d) Alternate value, 3.19 µg at/L, not used in interpolation.
e) Alternate value, 3.01 µg at/L, not used in interpolation.
f) Alternate value, 3.00 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| **140** | HORIZON; July 23, 1952; 0712, 0839 GCT; 14°14.5'S, 83°06'W; sounding, 2900 fm; wind, 120°, force 4; weather, overcast; sea, very rough; wire angle, 15°. 25°. | | | | | | | | |
| 0 | 18.70 | 5.12 | 0.94 | 0 | 0 | 18.70 | 5.12 | 0.94 | 0 |
| 10 | 18.70 | 5.18 | 0.96 | 1.3 | 10 | 18.70 | 5.18 | 0.96 | 1.3 |
| 29 | 18.72 | 5.22 | 0.93 | 0 | 20 | 18.71 | 5.21 | 0.94 | 0.6 |
| 43 | 18.72 | 5.18 | 0.94 | 0.2 | 30 | 18.72 | 5.22 | 0.93 | 0 |
| 66 | 18.71 | 5.19 | 0.94 | 0 | 50 | 18.72 | 5.18 | 0.94 | 0.2 |
| 88 | 18.72 | 5.14 | 0.97 | 0.5 | 75 | 18.72 | 5.19 | 0.95 | 0.2 |
| 110 | 14.68 | 1.62 | 2.34 | 9.4 | 100 | 16.05 | 2.80 | 1.10 | 3.5 |
| 162 | 12.67 | 0.11 | 2.88 | 26.5 | 150 | 12.96 | 0.13 | 2.85 | 24.5 |
| 217 | 11.90 | 0.13 | 2.80 | 28.3 | 200 | 12.12 | 0.13 | 2.82 | 28 |
| 271 | 11.32 | 0.11 | 2.81 | 29.7 | 250 | 11.55 | 0.11 | 2.81 | 29 |
| 322 | 10.80 | 0.13 | 3.00 | 32.6 | 300 | 11.04 | 0.12 | 2.91 | 31 |
| 426 | 9.31 | 0.17 | 3.13a) | 35.5 | 400 | 9.72 | 0.16 | 3.10 | 35 |
| 532 | 7.70 | 0.21 | 3.26b) | 42.8 | 500 | 8.19 | 0.22 | 3.25 | 41 |
| 636 | 6.34 | 0.40 | 3.28 | 55.1 | 600 | 6.80 | 0.34 | 3.28 | 51 |
| | | | | | 700 | 5.93 | 0.52 | 3.28 | 60 |
| 450c) | 8.72 | 0.18 | 3.10 | 36.7 | 800 | 5.37 | 0.66 | 3.32 | 67 |
| 538 | 7.48 | 0.29 | 3.10 | 45.7 | 1000 | 4.47 | 1.24 | 3.26 | 83 |
| 728 | 5.78 | 0.58 | 3.28 | 61.4 | 1200 | 3.73 | 1.73 | 3.18 | 98 |
| 826 | 5.24 | 0.68 | 3.34 | 68.9 | 1500 | 3.03 | 2.03 | 3.00 | 115 |
| 875 | 4.98 | 0.90 | 3.27 | 73.6 | 2000 | 2.21 | 2.51 | 2.82 | 134 |
| 924 | 4.78 | 1.08 | 3.26 | 77.4 | 2500 | (1.87) | (3.01) | (2.73) | (140) |
| 975 | 4.61 | 1.14 | 3.26 | 80.5 | | | | | |
| 1024 | 4.34 | 1.34 | 3.25d) | 84.8 | | | | | |
| 1427 | 3.16 | 1.95 | 3.04 | 111.2 | | | | | |
| 1937 | 2.32 | 1.71u | 2.85 | 132.8 | | | | | |
| 2479 | 1.88 | 2.99 | 2.73 | 139.9 | | | | | |
| **141** | HORIZON; July 23, 1952; 1542 GCT; 14°33'S, 84°05.5'W; sounding, 2210 fm; wind, 150°, force 4; weather, drizzle; sea, very rough; wire angle, 18°. | | | | | | | | |
| 0 | 19.31 | 5.09 | | | 0 | 19.31 | 5.09 | | |
| 9 | 19.33 | 5.08 | | | 10 | 19.33 | 5.08 | | |
| 27 | 19.34 | 5.08 | | | 20 | 19.33 | 5.08 | | |
| 54 | 19.33 | 5.09 | | | 30 | 19.34 | 5.08 | | |
| 81 | 19.24 | 5.03 | | | 50 | 19.33 | 5.09 | | |
| 108 | 14.62 | 0.35 | | | 75 | 19.27 | 5.06 | | |
| 162 | 12.81 | 0.19 | | | 100 | 15.24 | 0.47 | | |
| 216 | 11.94 | 0.21 | | | 150 | 13.10 | 0.22 | | |
| 269 | 11.20 | 0.27 | | | 200 | 12.20 | 0.20 | | |
| 321 | 10.50 | 0.24 | | | 250 | 11.45 | 0.25 | | |
| 425 | 9.18 | 0.29 | | | 300 | 10.78 | 0.25 | | |
| 533 | 7.80 | 0.39 | | | 400 | 9.51 | 0.29 | | |
| 638 | 6.53 | 0.73 | | | 500 | 8.24 | 0.34 | | |
| 856 | 5.14 | 0.90 | | | 600 | 6.96 | 0.64 | | |
| 1061 | 4.20 | 1.42 | | | 700 | 6.06 | 0.77 | | |
| 1259 | 3.52 | 1.82 | | | 800 | 5.45 | 0.85 | | |
| | | | | | 1000 | 4.46 | 1.25 | | |
| | | | | | 1200 | 3.71 | 1.70 | | |

a) Alternate value, 3.21 µg at/L, not used in interpolation.
b) Alternate value, 3.35 µg at/L, not used in interpolation.
c) Overlapping casts; reconciliation of property curves when necessary.
d) Alternate value, 3.17 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 24-23, 1952; 0124, 2320 GCT; 14°59'S, 85°03'W; sounding, 2700 fm; wind, 140°, force 4; weather, cloudy; sea, rough; wire angle, 16°, 22°. 142

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.00 | 5.13 | 0.82 | 0.4 | 0 | 20.00 | 5.13 | 0.82 | 0.4 |
| 9 | 20.02 | 5.11 | 0.82 | 0 | 10 | 20.02 | 5.11 | 0.82 | 0 |
| 23 | 20.01 | 5.09 | 0.82 | 1.3 | 20 | 20.01 | 5.10 | 0.82 | 0.9 |
| 42 | 20.03 | 5.09 | 0.82 | 0 | 30 | 20.01 | 5.09 | 0.82 | 0.8 |
| 60 | 20.03 | 5.04 | 0.86 | 0 | 50 | 20.03 | 5.06 | 0.84 | 0 |
| 79 | 19.99 | 5.03 | 0.86 | 0 | 75 | 20.00 | 5.03 | 0.86 | 0 |
| 103 | 19.83 | 4.87 | 0.94 | 0 | 100 | 19.87 | 4.93 | 0.93 | 0 |
| 154 | 13.37 | 1.46 | 2.33a) | 12.2 | 150 | 13.69 | 1.73 | 2.17 | 10.8 |
| 205 | 11.94 | 0.14 | 2.77 | 25.9 | 200 | 12.04 | 0.16 | 2.74 | 25 |
| 261 | 11.10 | 0.11 | 2.78b) | 29.2 | 250 | 11.27 | 0.11 | 2.82 | 29 |
| 308 | 10.20 | 0.16 | 2.81 | 30.4 | 300 | 10.33 | 0.15 | 2.81 | 30 |
| 415 | 8.70 | 0.29 | 2.85 | 34.9 | 400 | 8.89 | 0.28 | 2.84 | 35 |
| 520 | 7.54 | 0.59 | 2.92 | 39.4 | 500 | 7.76 | 0.53 | 2.90 | 38 |
| 624 | 6.62 | 0.73 | 3.04 | 47.2 | 600 | 6.84 | 0.76 | 3.02 | 46 |
| | | | | | 700 | 6.03 | 0.78 | 3.10 | 54 |
| 495c) | 7.68 | 0.51 | 2.90 | 38.0 | 800 | 5.26 | 0.93 | 3.17 | 63 |
| 596 | 6.71 | 0.76 | 3.02d) | 45.7 | 1000 | 4.29 | 1.41 | 3.16 | 80 |
| 799 | 5.27 | 0.92 | 3.16e) | 63.2 | 1200 | 3.56 | 1.77 | 3.14 | 99 |
| 901 | 4.70 | 1.31 | 3.17f) | 70.7 | 1500 | 2.84 | 2.17 | 3.01 | 121 |
| 952 | 4.52 | 1.27 | 3.18g) | 79.6 | 2000 | 2.23 | 2.64 | 2.84 | 131 |
| 1003 | 4.28 | 1.42 | 3.16 | 80.5 | 2500 | 1.87 | 2.92 | 2.81 | 141 |
| 1050 | 4.07 | 1.57 | 3.16 | 84.8 | | | | | |
| 1105 | 3.88 | 1.66 | 3.18 | 89.3 | | | | | |
| 1206 | 3.54 | 1.78 | 3.14h) | 100.4 | | | | | |
| 1515 | 2.82 | 2.18 | 3.00 | 122.2 | | | | | |
| 2047 | 2.16 | 2.67 | 2.87i) | 131.9 | | | | | |
| 2613 | 1.84 | 2.99 | 2.81 | 142.9 | | | | | |

HORIZON; July 24, 1952; 1337 GCT; 13°59'S, 84°59.5'W; sounding, 2790 fm; wind, 120°, force 4; weather, partly cloudy; sea, moderate; wire angle, 24°. 143

| | | | | | |
|---|---|---|---|---|---|
| 0 | 19.91 | 5.03 | 0 | 19.91 | 5.03 |
| 9 | 19.92 | 5.06 | 10 | 19.92 | 5.06 |
| 27 | 19.92 | 5.04 | 20 | 19.92 | 5.05 |
| 55 | 19.96 | 5.00 | 30 | 19.92 | 5.04 |
| 82 | 19.98 | 5.00 | 50 | 19.95 | 5.01 |
| 108 | 15.53 | 3.51 | 75 | 19.98 | 5.00 |
| 161 | 12.66 | 0.15 | 100 | 17.05 | 4.46 |
| 213 | 11.85 | 0.20 | 150 | 12.96 | 0.24 |
| 265 | 11.18 | 0.14 | 200 | 12.04 | 0.19 |
| 317 | 10.44 | 0.21 | 250 | 11.37 | 0.16 |
| 414 | 8.94 | 0.31 | 300 | 10.68 | 0.19 |
| 515 | 7.72 | 0.42 | 400 | 9.15 | 0.31 |
| 615 | 6.80 | 0.51 | 500 | 7.89 | 0.40 |
| 819 | 5.34 | 0.82 | 600 | 6.94 | 0.50 |
| 1024 | 4.28 | 1.50 | 700 | 6.15 | 0.65 |
| 1230 | 3.49 | 1.77 | 800 | 5.47 | 0.87 |
| | | | 1000 | 4.40 | 1.44 |
| | | | 1200 | 3.59 | 1.73 |

a) Alternate value, 2.26 µg at/L, not used in interpolation.
b) Mean value of 2.75 and 2.82 µg at/L.
c) Overlapping casts; reconciliation of property curves when necessary.
d) Mean value of 2.97 and 3.06 µg at/L.
e) Mean value of 3.10 and 3.23 µg at/L.
f) Alternate value, 3.31 µg at/L, not used in interpolation.
g) Mean value of 3.14 and 3.21 µg at/L.
h) Mean value of 3.10 and 3.17 µg at/L.
i) Alternate value, 2.79 µg at/L, not used in interpolation.

| | OBSERVED | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 144 | HORIZON; July 24, 1952; 2029 GCT; 12°59'S, 85°01'W; sounding, 2300 fm; wind, 120°, force 4; weather, drizzle; sea, rough; wire angle, 18°. | | | | | | | | | |
| | 0 | 19.50 | 5.01 | 1.20a) | 1.4 | 0 | 19.50 | 5.01 | 1.20 | 1.4 |
| | 10 | 19.38 | 5.09 | 1.17 | 1.6 | 10 | 19.38 | 5.09 | 1.17 | 1.6 |
| | 24 | 19.32 | 5.00 | 1.16 | 1.6 | 20 | 19.34 | 5.00 | 1.16 | 1.6 |
| | 52 | 19.32 | 4.97 | 1.17 | 1.3 | 30 | 19.32 | 5.00 | 1.16 | 1.5 |
| | 76 | 16.98 | 3.11 | 1.58 | 5.2 | 50 | 19.32 | 4.98 | 1.17 | 1.3 |
| | 104 | 14.32 | 1.58 | 2.06 | 9.5 | 75 | 17.50 | 3.20 | 1.58 | 5.1 |
| | 155 | 12.38 | 0.12 | 2.59 | 30.6 | 100 | 14.60 | 1.80 | 1.99 | 9 |
| | 206 | 11.64 | 0.16 | 2.58 | 27.2 | 150 | 12.52 | 0.13 | 2.58 | 29 |
| | 260 | 10.95 | 0.20 | 2.58 | 29.7 | 200 | 11.73 | 0.15 | 2.58 | 27 |
| | 305 | 10.45 | 0.54 | 2.58 | 31.5 | 250 | 11.08 | 0.19 | 2.58 | 29 |
| | 410 | 9.20 | 0.26 | 2.68 | 35.6 | 300 | 10.51 | 0.52 | 2.58 | 31 |
| | 510 | 7.98 | 0.46 | 2.80 | 39.4 | 400 | 9.35 | 0.27 | 2.67 | 35 |
| | 610 | 6.92 | 0.46 | 2.93 | 50.9 | 500 | 8.10 | 0.44 | 2.79 | 39 |
| | 807 | 5.36 | 0.70 | 3.03 | 65.9 | 600 | 7.04 | 0.46 | 2.92 | 50 |
| | 1006 | 4.33 | 1.30 | 2.99 | 84.2 | 700 | 6.15 | 0.54 | 2.98 | 58 |
| | 1203 | 3.70 | 1.61 | 2.95 | 101.9 | 800 | 5.41 | 0.59 | 3.03 | 65 |
| | | | | | | 1000 | 4.37 | 1.27 | 3.00 | 84 |
| | | | | | | 1200 | 3.72 | 1.60 | 2.95 | 101 |
| 145 | HORIZON; July 25, 1952; 0351 GCT; 11°57.5'S, 85°00'W; sounding, 2340 fm; wind, 140°, force 4; weather, cloudy; sea, moderate; wire angle, 23°. | | | | | | | | | |
| | 0 | 20.02 | 5.04 | | | 0 | 20.02 | 5.04 | | |
| | 9 | 20.04 | 5.05 | | | 10 | 20.04 | 5.05 | | |
| | 27 | 20.04 | 5.08 | | | 20 | 20.04 | 5.07 | | |
| | 55 | 20.01 | 5.04 | | | 30 | 20.04 | 5.08 | | |
| | 82 | 16.32 | 2.89 | | | 50 | 20.02 | 5.06 | | |
| | 109 | 13.84 | 0.05 | | | 75 | 18.20 | 4.54 | | |
| | 162 | 12.23 | 0.29 | | | 100 | 14.42 | 0.20 | | |
| | 216 | 11.48 | 0.43 | | | 150 | 12.49 | 0.24 | | |
| | 268 | 10.96 | 0.33 | | | 200 | 11.65 | 0.41 | | |
| | 319 | 10.34 | 0.33 | | | 250 | 11.14 | 0.37 | | |
| | 419 | 9.00 | 0.29 | | | 300 | 10.57 | 0.33 | | |
| | 522 | 7.76 | 0.40 | | | 400 | 9.24 | 0.29 | | |
| | 622 | 6.76 | 0.39 | | | 500 | 8.02 | 0.39 | | |
| | 827 | 5.30 | 0.68 | | | 600 | 6.99 | 0.39 | | |
| | 1033 | 4.38 | 1.27 | | | 700 | 6.13 | 0.44 | | |
| | 1236 | 3.70 | 1.64 | | | 800 | 5.46 | 0.62 | | |
| | | | | | | 1000 | 4.53 | 1.20 | | |
| | | | | | | 1200 | 3.80 | 1.59 | | |
| 146 | HORIZON; July 25, 1952; 1140 GCT; 10°51'S, 85°00'W; sounding, 2220 fm; wind, 130°, force 3; weather, overcast; sea, rough; wire angle, 15°. | | | | | | | | | |
| | 0 | 20.43 | 4.92 | 1.00 | 2.7 | 0 | 20.43 | 4.92 | 1.00 | 2.7 |
| | 10 | 20.46 | 4.95 | 1.01 | 2.2 | 10 | 20.46 | 4.95 | 1.01 | 2.2 |
| | 25 | 20.46 | 5.03 | 1.03 | 1.6 | 20 | 20.46 | 5.02 | 1.02 | 1.7 |
| | 54 | 20.47 | 4.88 | 1.04 | 2.0 | 30 | 20.46 | 5.02 | 1.03 | 1.6 |
| | 77 | 15.46 | 0.64 | 2.28 | 11.3 | 50 | 20.47 | 4.94 | 1.04 | 1.9 |
| | 105 | 13.50 | 0.13 | 2.54 | 19.6 | 75 | 15.60 | 1.10 | 2.14 | 11.0 |
| | 157 | 12.47 | 0.13 | 2.53 | 26.1 | 100 | 13.67 | 0.14 | 2.51 | 18.7 |
| | 208 | 11.83 | 0.32 | 2.49 | 25.9 | 150 | 12.58 | 0.13 | 2.53 | 25 |
| | 262 | 11.36 | 0.17 | 2.44b) | 29.5 | 200 | 11.91 | 0.29 | 2.50 | 26 |
| | 308 | 10.74 | 0.15 | 2.38 | 32.0 | 250 | 11.49 | 0.20 | 2.45 | 29 |
| | 413 | 9.40 | 0.20 | 2.76 | 37.1 | 300 | 10.85 | 0.16 | 2.39 | 32 |
| | 514 | 7.92 | 0.33 | 2.88 | 41.9 | 400 | 9.58 | 0.19 | 2.73 | 37 |
| | 615 | 6.69 | 0.42 | 3.05 | 48.6 | 500 | 8.15 | 0.32 | 2.87 | 41 |
| | 816 | 5.31 | 0.62 | 3.12 | 65.3 | 600 | 6.85 | 0.42 | 3.03 | 47 |
| | 1021 | 4.37 | 1.23 | 3.03 | 87.3 | 700 | 6.06 | 0.47 | 3.09 | 55 |
| | 1217 | 3.68 | 1.61 | 2.90 | 103.5 | 800 | 5.43 | 0.59 | 3.12 | 64 |
| | | | | | | 1000 | 4.46 | 1.17 | 3.05 | 85 |
| | | | | | | 1200 | 3.74 | 1.58 | 2.91 | 103 |



a) Alternate value, 1.10 µg at/L, not used in interpolation.
b) Alternate value, 2.56 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 25, 1952; 1808 GCT; 9°58.5'S, 85°00'W; sounding, 2400 fm; wind, 140°, force 3; weather, overcast; sea, rough; wire angle, 17°. 147

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.56 | 4.87 | | | 0 | 20.56 | 4.87 | | |
| 10 | 20.55 | 4.92 | | | 10 | 20.55 | 4.92 | | |
| 24 | 20.52 | 4.91 | | | 20 | 20.54 | 4.92 | | |
| 52 | 20.38 | 4.86 | | | 30 | 20.51 | 4.91 | | |
| 75 | 15.18 | 0.45 | | | 50 | 20.39 | 4.87 | | |
| 102 | 13.71 | 0.29 | | | 75 | 15.18 | 0.45 | | |
| 153 | 12.73 | 0.28 | | | 100 | 13.80 | 0.30 | | |
| 204 | 12.15 | 0.32 | | | 150 | 12.77 | 0.28 | | |
| 260 | 11.52 | 0.19 | | | 200 | 12.20 | 0.32 | | |
| 306 | 10.92 | 0.31 | | | 250 | 11.65 | 0.20 | | |
| 413 | 9.43 | 0.23 | | | 300 | 11.00 | 0.29 | | |
| 512 | 7.94 | 0.29 | | | 400 | 9.65 | 0.24 | | |
| 614 | 6.83 | 0.34 | | | 500 | 8.13 | 0.27 | | |
| 813 | 5.40 | 0.56 | | | 600 | 6.98 | 0.34 | | |
| 1015 | 4.44 | 1.28 | | | 700 | 6.14 | 0.39 | | |
| 1215 | 3.70 | 1.65 | | | 800 | 5.47 | 0.53 | | |
| | | | | | 1000 | 4.51 | 1.22 | | |
| | | | | | 1200 | 3.75 | 1.63 | | |

HORIZON; July 26, 1952; 0036 GCT; 9°03.5'S, 84°59'W; sounding, 2350 fm; wind, 160°, force 4; weather, cloudy; sea, rough; wire angle, 15°. 148

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.01 | 5.00 | 1.06 | 0.5 | 0 | 20.01 | 5.00 | 1.06 | 0.5 |
| 10 | 20.02 | 4.97 | 1.15 | 3.8 | 10 | 20.02 | 4.97 | 1.15 | 3.8 |
| 24 | 20.02 | 4.98 | 1.16 | 2.3 | 20 | 20.02 | 4.98 | 1.16 | 2.8 |
| 52 | 19.58 | 4.62 | 1.20 | 2.2 | 30 | 20.00 | 4.95 | 1.16 | 2.3 |
| 75 | 15.17 | 0.20 | 2.16 | 15.5 | 50 | 19.67 | 4.70 | 1.19 | 2.2 |
| 103 | 13.86 | 0.29 | 2.26 | 18.0 | 75 | 15.17 | 0.20 | 2.16 | 15.5 |
| 153 | 12.92 | 0.16 | 2.29 | 23.6 | 100 | 14.00 | 0.28 | 2.26 | 17.7 |
| 204 | 12.50 | 0.18 | 2.34 | 24.8 | 150 | 12.96 | 0.16 | 2.29 | 23 |
| 259 | 11.90 | 0.20 | 2.43 | 27.0 | 200 | 12.54 | 0.17 | 2.35 | 25 |
| 304 | 11.44 | 0.20 | 2.46 | 28.8 | 250 | 11.99 | 0.19 | 2.42 | 27 |
| 412 | 9.69 | 0.18 | 2.63 | 35.5 | 300 | 11.49 | 0.20 | 2.46 | 29 |
| 515 | 8.16 | 0.20 | 2.84a) | 43.6 | 400 | 9.85 | 0.18 | 2.61 | 35 |
| 618 | 6.80 | 0.17 | 3.01 | 56.3 | 500 | 8.40 | 0.20 | 2.81 | 42 |
| 820 | 5.25 | 0.72 | 3.07 | 73.4 | 600 | 7.02 | 0.17 | 2.98 | 54 |
| 1021 | 4.38 | 1.24 | 3.02 | 89.3 | 700 | 5.99 | 0.35 | 3.04 | 64 |
| 1221 | 3.75 | 1.66 | 2.94b) | 101.9 | 800 | 5.36 | 0.66 | 3.07 | 72 |
| | | | | | 1000 | 4.47 | 1.20 | 3.03 | 88 |
| | | | | | 1200 | 3.81 | 1.63 | 2.93 | 101 |

HORIZON; July 26, 1952; 0731 GCT; 8°07'S, 84°58'W; sounding, 2330 fm; wind, 130°, force 4; weather, cloudy; sea, moderate; wire angle, 16°. 149

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.39 | 5.18 | | | 0 | 19.39 | 5.18 | | |
| 9 | 19.41 | 5.15 | | | 10 | 19.41 | 5.15 | | |
| 24 | 19.40 | 5.14 | | | 20 | 19.40 | 5.14 | | |
| 52 | 15.74 | 0.68 | | | 30 | 19.37 | 4.95 | | |
| 76 | 14.29 | 0.29 | | | 50 | 16.00 | 0.77 | | |
| 105 | 13.34 | 0.27 | | | 75 | 14.30 | 0.29 | | |
| 157 | 12.88 | 0.20 | | | 100 | 13.41 | 0.27 | | |
| 209 | 12.31 | 0.14 | | | 150 | 12.93 | 0.20 | | |
| 265 | 11.72 | 0.23 | | | 200 | 12.39 | 0.14 | | |
| 311 | 11.10 | 0.16 | | | 250 | 11.87 | 0.23 | | |
| 418 | 9.10 | 0.20 | | | 300 | 11.24 | 0.17 | | |
| 523 | 7.56 | 0.13 | | | 400 | 9.44 | 0.20 | | |
| 627 | 6.50 | 0.23 | | | 500 | 7.87 | 0.14 | | |
| 830 | 5.18 | 0.84 | | | 600 | 6.75 | 0.21 | | |
| 1035 | 4.30 | 1.44 | | | 700 | 5.94 | 0.42 | | |
| 1233 | 3.70 | 1.73 | | | 800 | 5.34 | 0.74 | | |
| | | | | | 1000 | 4.44 | 1.36 | | |
| | | | | | 1200 | 3.80 | 1.70 | | |

a) Alternate value, 2.77 µg at/L, not used in interpolation.
b) Mean value of 2.91 and 2.98 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 150 | HORIZON; July 26, 1952; 1420 GCT; 7°10.5'S, 84°58'W; sounding, 2260 fm; wind, 140°, force 4; weather, cloudy; sea, rough; wire angle, 11°. | | | | | | | | |
| 0 | 20.42 | 5.07 | 1.10 | 2.5 | 0 | 20.42 | 5.07 | 1.10 | 2.5 |
| 10 | 20.42 | 5.04 | 1.10 | 2.9 | 10 | 20.42 | 5.04 | 1.10 | 2.9 |
| 24 | 20.41 | 5.04 | 1.12 | 2.9 | 20 | 20.42 | 5.04 | 1.11 | 2.9 |
| 53 | 19.51 | 4.97 | 1.34 | 3.8 | 30 | 20.40 | 5.04 | 1.14 | 3.1 |
| 77 | 15.56 | 0.91 | 1.96 | 9.2 | 50 | 20.03 | 4.99 | 1.29 | 3.6 |
| 105 | 13.98 | - | - | - | 75 | 15.70 | 1.20 | 1.95 | 9.0 |
| 158 | 12.34 | 0.38 | 2.39 | 24.8 | 100 | 14.29 | 0.68 | 2.16 | 15.3 |
| 210 | 11.86 | 0.64 | 2.34 | 26.8 | 150 | 12.46 | 0.38 | 2.37 | 24 |
| 315 | 10.82 | 0.17 | 2.54 | 32.9 | 200 | 11.95 | 0.60 | 2.35 | 27 |
| 424 | 8.96 | 0.16 | 2.78 | 41.4 | 250 | 11.49 | 0.50 | 2.39 | 29 |
| 528 | 7.40 | 0.24 | 2.98 | 52.7 | 300 | 11.01 | 0.24 | 2.50 | 32 |
| 632 | 6.46 | 0.27 | 3.03 | 59.9 | 400 | 9.43 | 0.16 | 2.73 | 40 |
| 836 | 5.29 | 0.66 | 3.06 | 77.8 | 500 | 7.77 | 0.24 | 2.94 | 50 |
| 1040 | 4.28 | 1.34 | 2.97 | 92.5 | 600 | 6.70 | 0.26 | 3.02 | 58 |
| 1235 | 3.68 | 1.62 | 2.96 | 107.3 | 700 | 6.03 | 0.37 | 3.05 | 66 |
| 1576 | 2.81 | 2.00 | 2.86 | 131.0 | 800 | 5.47 | 0.56 | 3.06 | 75 |
| | | | | | 1000 | 4.45 | 1.24 | 2.88 | 92 |
| | | | | | 1200 | 3.76 | 1.59 | 2.86 | 104 |
| | | | | | 1500 | 3.00 | 1.94 | 2.89 | 126 |
| 151 | HORIZON; July 26, 1952; 2230 GCT; 6°00'S, 84°58'W; sounding, 2140 fm; wind, 150°, force 4; weather, cloudy; sea, rough; wire angle, 26°. | | | | | | | | |
| 0 | 18.31 | 4.97 | | | 0 | 18.31 | 4.97 | | |
| 9 | 18.30 | 4.99 | | | 10 | 18.30 | 4.99 | | |
| 23 | 18.26 | 4.92 | | | 20 | 18.27 | 4.95 | | |
| 50 | 17.35 | 2.12 | | | 30 | 18.16 | 4.80 | | |
| 72 | 14.72 | 1.03 | | | 50 | 17.35 | 2.12 | | |
| 98 | 13.84 | 1.05 | | | 75 | 14.63 | 1.03 | | |
| 144 | 12.92 | 0.39 | | | 100 | 13.77 | 1.03 | | |
| 190 | 12.46 | 0.33 | | | 150 | 12.85 | 0.36 | | |
| 282 | 11.50 | 0.88u | | | 200 | 12.35 | 0.33 | | |
| 378 | 9.66 | 0.17 | | | 250 | 11.87 | 0.27 | | |
| 470 | 8.06 | 0.20 | | | 300 | 11.23 | 0.22 | | |
| 564 | 7.08 | 0.27 | | | 400 | 9.22 | 0.18 | | |
| 754 | 5.70 | 0.75 | | | 500 | 7.73 | 0.22 | | |
| 947 | 4.51 | 1.30 | | | 600 | 6.79 | 0.33 | | |
| 1134 | 3.88 | 1.64 | | | 700 | 6.05 | 0.59 | | |
| 1467 | 2.96 | 1.99 | | | 800 | 5.38 | 0.89 | | |
| | | | | | 1000 | 4.31 | 1.43 | | |
| | | | | | 1200 | 3.69 | 1.74 | | |
| | | | | | 1500 | (2.87) | (2.00) | | |
| 152 | HORIZON; July 27, 1952; 0558 GCT; 5°02.5'S, 84°59'W; sounding, 2130 fm; wind, 140°, force 4; weather, overcast; sea, rough; wire angle, 30°. | | | | | | | | |
| 0 | 19.08 | 5.11 | 1.42 | 4.7 | 0 | 19.08 | 5.11 | 1.42 | 4.7 |
| 8 | 19.06 | 5.08 | 1.41 | 4.0 | 10 | 19.06 | 5.10 | 1.41 | 3.9 |
| 22 | 19.06 | 5.11 | 1.44 | 2.9 | 20 | 19.06 | 5.11 | 1.43 | 3.0 |
| 47 | 15.98 | 1.29 | 2.08 | 8.3 | 30 | 18.93 | 4.40 | 1.52 | 3.8 |
| 68 | 14.34 | 0.84 | 2.18 | 14.8 | 50 | 14.84 | 1.07 | 2.11 | 9.9 |
| 92 | 13.70 | 0.84 | 2.24 | 17.3 | 75 | 14.23 | 0.84 | 2.20 | 15.8 |
| 135 | 13.29 | 0.26 | 2.42 | 20.3 | 100 | 13.62 | 0.76 | 2.28 | 18 |
| 177 | 12.93 | 0.46 | 2.44a) | 21.1 | 150 | 13.15 | 0.32 | 2.45 | 21 |
| 267 | 12.00 | 0.38 | 2.50 | 23.9 | 200 | 12.71 | 0.46 | 2.50 | 21 |
| 357 | 10.26 | 0.12 | 2.80 | 32.4 | 250 | 12.20 | 0.40 | 2.52 | 23 |
| 445 | 8.42 | 0.14 | 3.00 | 42.5 | 300 | 11.43 | 0.28 | 2.61 | 26 |
| 533 | 7.44 | 0.45 | 3.01 | 46.8 | 400 | 9.20 | 0.13 | 2.92 | 37 |
| 709 | 5.93 | 0.68 | 3.17 | 63.2 | 500 | 7.81 | 0.33 | 3.00 | 45 |
| 884 | 5.02 | 1.02 | 3.18 | 75.1 | 600 | 6.82 | 0.54 | 3.06 | 54 |
| 1076 | 4.17 | 1.43 | 3.11 | 90.2 | 700 | 6.00 | 0.66 | 3.16 | 63 |
| 1389 | 3.20 | 1.96 | 3.02 | 115.9 | 800 | 5.44 | 0.85 | 3.18 | 70 |
| | | | | | 1000 | 4.50 | 1.27 | 3.14 | 84 |
| | | | | | 1200 | 3.74 | 1.66 | 3.07 | 101 |

a) Mean value of 2.40 and 2.47 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 27, 1952; 1327 GCT; 4°05'S, 85°00'W; sounding, 1830 fm; wind, 160°, force 5; weather, overcast; sea, rough; wire angle, 18°. 153

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.76 | 4.93 | | | 0 | 18.76 | 4.93 | | |
| 10 | 18.77 | 4.95 | | | 10 | 18.77 | 4.95 | | |
| 24 | 18.78 | 4.96 | | | 20 | 18.78 | 4.96 | | |
| 52 | 18.50 | 4.60 | | | 30 | 18.74 | 4.96 | | |
| 75 | 16.30 | 1.97 | | | 50 | 18.54 | 4.83 | | |
| 103 | 14.57 | 0.87 | | | 75 | 16.30 | 1.97 | | |
| 153 | 13.73 | 0.99 | | | 100 | 14.67 | 0.89 | | |
| 203 | 13.12 | 0.53 | | | 150 | 13.79 | 0.98 | | |
| 302 | 11.72 | 0.43 | | | 200 | 13.17 | 0.57 | | |
| 406 | 8.94 | 0.27 | | | 250 | 12.61 | 0.48 | | |
| 505 | 7.58 | 0.41 | | | 300 | 11.79 | 0.44 | | |
| 604 | 6.39 | 0.56 | | | 400 | 9.06 | 0.27 | | |
| 799 | 5.30 | 1.22 | | | 500 | 7.65 | 0.41 | | |
| 997 | 4.54 | 1.41 | | | 600 | 6.43 | 0.54 | | |
| 1191 | 3.87 | 1.69 | | | 700 | 5.76 | 0.93 | | |
| 1531 | 2.95 | 2.01 | | | 800 | 5.29 | 1.23 | | |
| | | | | | 1000 | 4.54 | 1.42 | | |
| | | | | | 1200 | 3.84 | 1.69 | | |
| | | | | | 1500 | 3.03 | 1.98 | | |

HORIZON; July 27, 1952; 2101 GCT; 2°59'S, 85°00.5'W; sounding, 1690 fm; wind, 140°, force 4; weather, overcast; sea, rough; wire angle, 23°. 154

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.06 | 4.54 | 1.20 | 5.0 | 0 | 19.06 | 4.54 | 1.20 | 5.0 |
| 9 | 19.02 | 4.53 | 1.15 | 5.0 | 10 | 19.02 | 4.53 | 1.15 | 5.1 |
| 23 | 18.98 | 4.54 | 1.13 | 5.2 | 20 | 19.00 | 4.54 | 1.13 | 5.2 |
| 50 | 17.72 | 4.07 | 1.35 | 7.4 | 30 | 18.90 | 4.53 | 1.14 | 5.7 |
| 72 | 16.84 | 2.79 | 1.49 | 8.5 | 50 | 17.72 | 4.07 | 1.35 | 7.4 |
| 100 | 14.48 | 1.02 | 1.94 | 15.8 | 75 | 15.80 | 1.19 | 1.49 | 8.8 |
| 150 | 13.90 | 1.37 | 1.94 | 16.0 | 100 | 14.48 | 1.02 | 1.38 | 15.8 |
| 200 | 13.30 | 0.58 | 2.26 | 19.8 | 150 | 13.90 | 1.37 | 1.38 | 16.0 |
| 300 | 11.66 | 0.20 | 2.48 | 28.1 | 200 | 13.30 | 0.58 | 2.26 | 19.8 |
| 404 | 8.64 | 0.17 | 2.82 | 42.1 | 250 | 12.67 | 0.25 | 2.38 | 24 |
| 504 | 7.58 | 0.68 | 2.82 | 47.2 | 300 | 11.66 | 0.20 | 2.48 | 28 |
| 605 | 6.77 | 0.75 | 2.88 | 56.9 | 400 | 8.71 | 0.17 | 2.81 | 41 |
| 806 | 5.62 | 1.09 | 2.89 | 71.3 | 500 | 7.62 | 0.65 | 2.82 | 47 |
| 1007 | 4.58 | 1.40 | 2.92 | 75.1 | 600 | 6.82 | 0.74 | 2.88 | 56 |
| 1200 | 3.91 | 1.54 | 2.94 | 69.3u | 700 | 6.20 | 0.88 | 2.88 | 66 |
| 1545 | 3.00 | 1.91 | 2.92 | 122.2 | 800 | 5.66 | 1.07 | 2.89 | 71 |
| | | | | | 1000 | 4.61 | 1.39 | 2.92 | 75 |
| | | | | | 1200 | 3.91 | 1.54 | 2.94 | |
| | | | | | 1500 | 3.12 | 1.86 | 2.93 | |

HORIZON; July 28, 1952; 0505 GCT; 1°56'S, 84°59.5'W; sounding, 1410 fm; wind, 160°, force 4; weather, cloudy; sea, moderate; wire angle, 28°. 155

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.90 | 5.04 | | | 0 | 19.90 | 5.04 | | |
| 8 | 19.90 | 5.06 | | | 10 | 19.89 | 5.05 | | |
| 21 | 19.85 | 5.01 | | | 20 | 19.84 | 5.01 | | |
| 47 | 18.36 | 4.39 | | | 30 | 19.60 | 4.99 | | |
| 69 | 16.67 | 2.85 | | | 50 | 18.00 | 4.08 | | |
| 93 | 14.94 | 2.30 | | | 75 | 15.82 | 2.60 | | |
| 140 | 14.46 | 2.23 | | | 100 | 14.86 | 2.28 | | |
| 187 | 13.92 | 1.91 | | | 150 | 14.34 | 2.19 | | |
| 280 | 12.13 | 0.34 | | | 200 | 13.74 | 1.73 | | |
| 378 | 9.50 | 0.28 | | | 250 | 12.85 | 0.82 | | |
| 474 | 7.84 | 0.51 | | | 300 | 11.58 | 0.33 | | |
| 569 | 7.19 | 0.72 | | | 400 | 9.00 | 0.33 | | |
| 764 | 5.48 | 1.36 | | | 500 | 7.62 | 0.56 | | |
| 961 | 4.78 | 1.51 | | | 600 | 6.87 | 0.85 | | |
| 1149 | 4.01 | 1.55 | | | 700 | 5.92 | 1.20 | | |
| 1480 | 3.17 | 1.88 | | | 800 | 5.34 | 1.41 | | |
| | | | | | 1000 | 4.62 | 1.52 | | |
| | | | | | 1200 | 3.85 | 1.58 | | |
| | | | | | 1500 | (3.12) | (1.91) | | |

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 156 | HORIZON; July 28, 1952; 1242 GCT; 0°53.5'S, 84°58'W; sounding, 1200 fm; wind, 190°, force 2; weather, drizzle; sea, moderate; wire angle, 22°. | | | | | | | | |
| 0 | 22.72 | 4.93 | 0.41a) | 0 | 0 | 22.72 | 4.93 | 0.41 | 0 |
| 9 | 22.72 | 4.95 | 0.36 | 0 | 10 | 22.72 | 4.94 | 0.36 | 0.1 |
| 27 | 16.08 | 2.66 | 1.36 | 11.2 | 20 | 22.68 | 3.00 | 0.40 | 6.0 |
| 54 | 15.19 | 2.28 | 1.52 | 13.9 | 30 | 15.75 | 2.54 | 1.39 | 11.9 |
| 80 | 15.08 | 2.37 | 1.54 | 14.9 | 50 | 15.22 | 2.28 | 1.50 | 13.6 |
| 106 | 14.85 | 2.34 | 1.56 | 15.1 | 75 | 15.09 | 2.36 | 1.54 | 15 |
| 157 | 14.50 | 2.24 | 1.58 | 15.1 | 100 | 14.90 | 2.36 | 1.56 | 15 |
| 208 | 13.48 | 1.56 | 1.88 | 19.3 | 150 | 14.54 | 2.26 | 1.58 | 15 |
| 310 | 11.51 | 0.56 | 2.38 | 30.8 | 200 | 13.67 | 1.67 | 1.83 | 19 |
| 409 | 9.05 | 0.32 | 2.67 | 42.3 | 250 | 12.66 | 1.04 | 2.11 | 24 |
| 515 | 7.71 | 0.66 | 2.70 | 50.4 | 300 | 11.74 | 0.63 | 2.34 | 30 |
| 617 | 6.64 | 0.96 | 2.76 | 58.5 | 400 | 9.23 | 0.33 | 2.65 | 41 |
| 827 | 5.54 | 1.25 | 2.79 | 75.1 | 500 | 7.90 | 0.60 | 2.70 | 49 |
| 1030 | 4.38 | 1.39 | 2.80 | 100.4 | 600 | 6.81 | 0.91 | 2.75 | 56 |
| 1227 | 3.70 | 1.73 | 2.80 | 113.0 | 700 | 6.20 | 1.10 | 2.78 | 64 |
| 1561 | 2.89 | 1.97 | 2.76 | 134.3 | 800 | 5.70 | 1.22 | 2.80 | 73 |
| | | | | | 1000 | 4.53 | 1.34 | 2.80 | 97 |
| | | | | | 1200 | 3.78 | 1.70 | 2.80 | 112 |
| | | | | | 1500 | 3.02 | 1.94 | 2.77 | 130 |
| 157 | HORIZON; July 28, 1952; 1926 GCT; 0°02'S, 85°02'W; sounding, 1780 fm; wind, 180°, force 3; weather, overcast; sea, moderate; wire angle, 25°. | | | | | | | | |
| 0 | 24.50 | 4.73 | | | 0 | 24.50 | 4.73 | | |
| 9 | 24.49 | 4.75 | | | 10 | 24.47 | 4.75 | | |
| 23 | 24.34 | 4.70 | | | 20 | 24.39 | 4.72 | | |
| 50 | 15.24 | 2.45 | | | 30 | 22.60 | 4.65 | | |
| 71 | 15.12 | 2.24 | | | 50 | 15.24 | 2.45 | | |
| 98 | 14.87 | 1.90 | | | 75 | 15.08 | 1.51 | | |
| 146 | 14.64 | 2.24 | | | 100 | 14.86 | 1.93 | | |
| 194 | 13.82 | 1.55 | | | 150 | 14.60 | 2.23 | | |
| 290 | 11.74 | 0.45 | | | 200 | 13.73 | 1.48 | | |
| 389 | 9.68 | 0.34 | | | 250 | 12.63 | 0.76 | | |
| 485 | 8.04 | 0.54 | | | 300 | 11.53 | 0.42 | | |
| 581 | 7.33 | 0.69 | | | 400 | 9.47 | 0.36 | | |
| 772 | 5.84 | 1.05 | | | 500 | 7.94 | 0.57 | | |
| 964 | 4.77 | 1.37 | | | 600 | 7.19 | 0.72 | | |
| 1149 | 4.01 | 1.58 | | | 700 | 6.38 | 0.90 | | |
| 1488 | 3.11 | 1.90 | | | 800 | 5.66 | 1.10 | | |
| | | | | | 1000 | 4.61 | 1.41 | | |
| | | | | | 1200 | 3.85 | 1.64 | | |
| | | | | | 1500 | (3.08) | (1.92) | | |

a) Alternate value, 0.48 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 29, 1952; 0253, 0417 GCT; 1°01.5'N, 84°59.5'W; sounding, 1575 fm; wind, 200°, force 3; weather, cloudy; sea, rough; wire angle, 20°, 27°. 158

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.85 | 4.76 | 0.36 | 0 | 0 | 24.85 | 4.76 | 0.36 | 0 |
| 9 | 24.84 | 4.77 | 0.46 | 0 | 10 | 24.84 | 4.75 | 0.46 | 0 |
| 24 | 24.84 | - | 0.43 | 0 | 20 | 24.84 | 4.42 | 0.43 | 0 |
| 52 | 15.85 | 1.87 | 1.64 | 13.9 | 30 | 24.70 | 2.67 | 0.48 | 1.3 |
| 74 | 15.48 | 1.82 | 1.68 | 14.4 | 50 | 15.80 | 1.86 | 1.64 | 14.1 |
| 102 | 15.11 | 1.97 | 1.68 | 15.1 | 75 | 15.36 | 1.86 | 1.68 | 14.8 |
| 150 | 14.72 | 2.00 | 1.66 | 14.9 | 100 | 15.09 | 1.98 | 1.68 | 15.1 |
| 199 | 13.76 | 1.06 | 2.01 | 19.6 | 150 | 14.64 | 1.97 | 1.67 | 15.2 |
| 295 | 11.82 | 0.40 | 2.40 | 29.3 | 200 | 13.69 | 1.00 | 2.03 | 20 |
| 397 | 9.03 | 0.28 | 2.74 | 43.6 | 250 | 12.80 | 0.63 | 2.24 | 25 |
| 497 | 7.96 | 0.51 | 2.82 | 48.8 | 300 | 11.73 | 0.38 | 2.42 | 30 |
| 594 | 7.22 | 0.66 | 2.85 | 55.3 | 400 | 8.99 | 0.28 | 2.75 | 44 |
| 789 | 5.94 | 0.96 | 2.92 | 69.7 | 500 | 7.92 | 0.53 | 2.83 | 49 |
| 990 | 4.79 | 1.35 | 2.96a) | 88.0 | 600 | 7.19 | 0.67 | 2.85 | 56 |
| 1182 | 3.96 | 1.59 | 2.93 | 106.6 | 700 | 6.51 | 0.80 | 2.88 | 63 |
| 1525 | 2.94 | 1.94 | 2.88 | 132.8 | 800 | 5.87 | 0.98 | 2.92 | 70 |
| | | | | | 1000 | 4.74 | 1.36 | 2.95 | 89 |
| 1586 | 2.86 | 1.90 | 2.94 | 134.3 | 1200 | 3.90 | 1.61 | 2.92 | 108 |
| 1833 | 2.57 | 2.02 | 2.81 | 142.9 | 1500 | 2.99 | 1.92 | 2.90 | 132 |
| 2076 | 2.28 | 2.18 | 2.80 | 148.9 | 2000 | 2.36 | 2.14 | 2.80 | 147 |
| 2317 | 2.12 | 2.29 | 2.74b) | 156.4 | 2500 | 2.10 | 2.36 | 2.74 | 158 |
| 2558 | 2.08 | 2.27 | 2.74 | 158.2 | | | | | |
| 2800 | 2.03 | 2.49 | 2.75 | 159.5 | | | | | |

HORIZON; July 29, 1952; 1146, 1217 GCT; 2°08'N, 84°54.5'W; sounding, 1630 fm; wind, 180°, force 3; weather, overcast; sea, moderate; wire angle, 35°, 30°. 159

| | | | | | |
|---|---|---|---|---|---|
| 0 | 25.36 | 4.69 | 0 | 25.36 | 4.69 |
| 8 | 25.36 | 4.70 | 10 | 25.36 | 4.71 |
| 22 | 25.36 | 4.73 | 20 | 25.36 | 4.72 |
| | | | 30 | 25.30 | 4.72 |
| 47 | 24.42 | 4.41 | 50 | 23.55 | 4.31 |
| 67 | 17.36c) | 2.60 | 75 | 16.20 | 2.36 |
| 91 | 15.48 | 2.15 | 100 | 15.38 | 2.07 |
| 135 | 15.03 | 1.88 | 150 | 14.70 | 1.90 |
| 180 | 13.81 | 1.91 | 200 | 13.46 | 1.65 |
| 271 | 12.24 | 0.36 | 250 | 12.60 | 0.52 |
| 358 | 10.64 | 0.29 | 300 | 11.77 | 0.30 |
| 437 | 8.62 | 0.36 | 400 | 9.40 | 0.31 |
| 515 | 7.62 | 0.57 | 500 | 7.78 | 0.53 |
| 672 | 6.32 | 0.91 | 600 | 6.87 | 0.77 |
| 841 | 5.39 | 1.14 | 700 | 6.15 | 0.96 |
| 1030 | 4.63 | 1.35 | 800 | 5.59 | 1.09 |
| 1374 | 3.35 | 1.61 | 1000 | 4.78 | 1.32 |
| | | | 1200 | 3.95 | 1.49 |

a) Mean value of 2.92 and 2.99 µg at/L.
b) Alternate value, 2.81 µg at/L, not used in interpolation.
c) Alternate value, 17.51°C, not used in interpolation.

| | OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 160 | HORIZON; July 30, 1952; 0002 GCT; 3°00'N, 85°00'W; sounding, 1700 fm; wind, 200°, force 3; weather, cloudy; sea, rough; wire angle, 28°. | | | | | | | | | |
| | 0 | 25.84 | 4.60 | 0.41 | 0 | 0 | 25.84 | 4.60 | 0.41 | 0 |
| | 8 | 25.80 | 4.71 | 0.39 | 0 | 10 | 25.80 | 4.71 | 0.39 | 0 |
| | 21 | 25.81 | 4.65 | 0.42 | 0 | 20 | 25.81 | 4.65 | 0.42 | 0 |
| | 46 | 25.60 | 4.53 | 0.46 | 0 | 30 | 25.76 | 4.61 | 0.43 | 0 |
| | 66 | 16.64 | 2.37 | 1.54 | 10.4 | 50 | 19.65 | 4.44 | 0.50 | 0.3 |
| | 90 | 14.86 | 2.18 | 1.69 | 15.3 | 75 | 15.50 | 4.29 | 1.62 | 13.0 |
| | 135 | 14.09 | 1.23 | 2.08 | 18.2 | 100 | 14.62 | 1.94 | 1.80 | 16.5 |
| | 180 | 13.64 | 1.95 | 1.96 | 18.0 | 150 | 13.93 | 1.38 | 2.06 | 18.2 |
| | 268 | 12.56 | 0.44 | 2.36 | 24.5 | 200 | 13.42 | 1.72 | 2.00 | 19 |
| | 363 | 10.10 | 0.23 | 2.76 | 36.9 | 250 | 12.83 | 0.66 | 2.24 | 23 |
| | 453 | 8.82 | 0.24 | 2.85 | 45.0 | 300 | 11.63 | 0.30 | 2.53 | 29 |
| | 544 | 7.72 | 0.28 | 2.93 | 54.4 | 400 | 9.66 | 0.24 | 2.82 | 40 |
| | 727 | 6.08 | 0.73 | 3.00 | 69.7 | 500 | 8.25 | 0.24 | 2.88 | 50 |
| | 910 | 5.08 | 1.03 | 3.02 | 85.5 | 600 | 7.13 | 0.41 | 2.97 | 59 |
| | 1084 | 4.32 | 1.19 | 3.05 | 99.7 | 700 | 6.26 | 0.66 | 3.00 | 67 |
| | 1406 | 3.32 | 1.62 | 3.00 | 128.9 | 800 | 5.65 | 0.88 | 3.01 | 76 |
| | | | | | | 1000 | 4.67 | 1.12 | 3.05 | 93 |
| | | | | | | 1200 | 3.93 | 1.34 | 3.04 | 110 |
| 161 | HORIZON; July 30, 1952; 0745 GCT; 3°57.5'N, 85°01'W; sounding, 1640 fm; wind, 230°, force 3; weather, rain; sea, slight; wire angle, 25°. | | | | | | | | | |
| | 0 | 26.13 | 4.51 | | | 0 | 26.13 | 4.51 | | |
| | 8 | 26.11 | 4.63 | | | 10 | 26.11 | 4.63 | | |
| | 26 | 26.07 | 4.64 | | | 20 | 26.10 | 4.64 | | |
| | 53 | 16.68 | 1.87 | | | 30 | 25.96 | 4.59 | | |
| | 78 | 14.80 | 1.95 | | | 50 | 18.15 | 1.89 | | |
| | 104 | 14.42 | 1.52 | | | 75 | 14.85 | 1.94 | | |
| | 153 | 13.66 | 1.37 | | | 100 | 14.49 | 1.60 | | |
| | 206 | 13.28 | 1.30 | | | 150 | 13.69 | 1.37 | | |
| | 306 | 11.62 | 0.45 | | | 200 | 13.32 | 1.31 | | |
| | 404 | 9.24 | 0.11 | | | 250 | 12.69 | 0.94 | | |
| | 503 | 7.95 | 0.23 | | | 300 | 11.75 | 0.50 | | |
| | 598 | 7.00 | 0.29 | | | 400 | 9.34 | 0.12 | | |
| | 788 | 5.62 | 0.71 | | | 500 | 8.00 | 0.23 | | |
| | 980 | 4.76 | 1.24 | | | 600 | 6.98 | 0.29 | | |
| | 1170 | 3.98 | 1.34 | | | 700 | 6.22 | 0.47 | | |
| | 1507 | 2.96 | 1.83 | | | 800 | 5.57 | 0.75 | | |
| | | | | | | 1000 | 4.68 | 1.26 | | |
| | | | | | | 1200 | 3.87 | 1.37 | | |
| | | | | | | 1500 | 2.97 | 1.82 | | |
| 162 | HORIZON; July 30, 1952; 1526 GCT; 4°55'N, 85°01'W; sounding, missing; wind, 200°, force 4; weather, cloudy; sea, rough; wire angle, 12°. | | | | | | | | | |
| | 0 | 26.65 | 4.65 | 0.38 | 0 | 0 | 26.65 | 4.65 | 0.38 | 0 |
| | 10 | 26.64 | 4.68 | 0.32 | 0 | 10 | 26.64 | 4.68 | 0.32 | 0 |
| | 25 | 23.37 | 3.73 | 0.91 | 2.9 | 20 | 26.59 | 4.50 | 0.40 | 1.2 |
| | 54 | 15.44 | 1.14 | 2.00 | 15.8 | 30 | 22.20 | 2.60 | 1.64 | 5.5 |
| | 77 | 14.29 | 1.35 | 1.98 | 17.1 | 50 | 16.82 | 1.17 | 1.99 | 14.7 |
| | 106 | 13.56 | 1.07 | 2.06 | 19.1 | 75 | 14.32 | 1.35 | 1.98 | 17 |
| | 159 | 13.12 | 0.89 | 2.18 | 21.1 | 100 | 13.65 | 1.13 | 2.04 | 19 |
| | 211 | 12.66 | 0.74 | 2.24 | 23.4 | 150 | 13.19 | 0.90 | 2.17 | 21 |
| | 314 | 11.30 | 0.29 | 2.05u | 30.8 | 200 | 12.76 | 0.78 | 2.23 | 23 |
| | 421 | 9.26 | 0.08 | 2.83a) | 44.6 | 250 | 12.20 | 0.58 | 2.35 | 26 |
| | 524 | 7.70 | 0.23 | 2.96 | 54.4 | 300 | 11.50 | 0.35 | 2.51 | 30 |
| | 625 | 6.73 | 0.32 | 3.00 | 65.3 | 400 | 9.67 | 0.09 | 2.82 | 42 |
| | 825 | 5.46 | 0.65 | 3.06 | 82.3 | 500 | 8.03 | 0.20 | 2.95 | 52 |
| | 944 | 4.82 | 0.99 | 2.97 | 92.5 | 600 | 6.94 | 0.30 | 2.99 | 62 |
| | 1220 | 3.83 | 1.33 | 2.96 | 114.8 | 700 | 6.22 | 0.41 | 3.03 | 72 |
| | 1564 | 2.95 | 1.75 | 2.86 | 139.0 | 800 | 5.60 | 0.59 | 3.06 | 80 |
| | | | | | | 1000 | 4.59 | 1.08 | 2.96 | 97 |
| | | | | | | 1200 | 3.91 | 1.33 | 2.96 | 113 |
| | | | | | | 1500 | 3.09 | 1.66 | 2.87 | 135 |

a) Alternate value, 2.90 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; July 31, 1952; 0050 GCT; 6°00'N, 85°00'W; sounding, 1050 fm; wind, 240°, force 3; weather, rain; sea, moderate; wire angle, 13°. 163

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.88 | 4.65 | | | 0 | 26.88 | 4.65 | | |
| 10 | 26.73 | 4.73 | | | 10 | 26.73 | 4.72 | | |
| 25 | 22.46 | 3.39 | | | 20 | 24.75 | 4.35 | | |
| 54 | 15.58 | 0.96 | | | 30 | 21.30 | 2.75 | | |
| 78 | 14.64 | 0.70 | | | 50 | 16.60 | 1.14 | | |
| 107 | 13.78 | 0.65 | | | 75 | 14.74 | 0.71 | | |
| 160 | 13.13 | 0.62 | | | 100 | 13.94 | 0.65 | | |
| 211 | 12.59 | 0.51 | | | 150 | 13.25 | 0.63 | | |
| 315 | 11.06 | 0.37 | | | 200 | 12.70 | 0.55 | | |
| 424 | 8.74 | 0.16 | | | 250 | 12.07 | 0.46 | | |
| 529 | 7.48 | 0.18 | | | 300 | 11.33 | 0.39 | | |
| 633 | 6.75 | 0.39 | | | 400 | 9.24 | 0.18 | | |
| 837 | 5.28 | 1.03 | | | 500 | 7.72 | 0.17 | | |
| 1042 | 4.50 | 1.08 | | | 600 | 6.99 | 0.28 | | |
| 1240 | 3.74 | 1.30 | | | 700 | 6.21 | 0.60 | | |
| 1582 | 2.90 | 1.75 | | | 800 | 5.47 | 0.92 | | |
| | | | | | 1000 | 4.66 | 1.07 | | |
| | | | | | 1200 | 3.89 | 1.24 | | |
| | | | | | 1500 | 3.07 | 1.67 | | |

HORIZON; July 31, 1952; 0927 GCT; 7°05'N, 84°59'W; sounding, 980 fm; wind, 260°, force 3; weather, cloudy; sea, moderate; wire angle, 03°. 164

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.63 | 4.56 | 0.45 | 0 | 0 | 26.63 | 4.56 | 0.45 | 0 |
| 10 | 26.62 | 4.75 | 0.40 | 0 | 10 | 26.62 | 4.75 | 0.40 | 0 |
| 25 | 22.13 | 3.17 | 1.10a) | 5.6 | 20 | 24.30 | 4.62 | 0.42 | 3.3 |
| 53 | 15.71 | 0.98 | 2.06 | 16.2 | 30 | 21.10 | 2.45 | 1.56 | 8.4 |
| 77 | 14.40 | 0.73 | 2.15 | 17.8 | 50 | 16.43 | 1.15 | 2.02 | 15.5 |
| 107 | 13.78 | 0.76 | 2.18 | 19.3 | 75 | 14.45 | 0.73 | 2.14 | 17.6 |
| 160 | 13.18 | 0.69 | 2.21 | 21.6 | 100 | 13.89 | 0.75 | 2.18 | 19 |
| 214 | 12.56 | 0.50 | 2.32 | 23.2 | 150 | 13.29 | 0.72 | 2.20 | 21 |
| 321 | 10.60 | 0.20 | 2.60 | 34.7 | 200 | 12.75 | 0.56 | 2.28 | 23 |
| 432 | 8.88 | 0.11 | 2.90 | 48.2 | 250 | 12.00 | 0.38 | 2.42 | 26 |
| 539 | 7.54 | 0.18 | 3.00 | 56.7 | 300 | 11.06 | 0.24 | 2.55 | 32 |
| 644 | 6.66 | 0.30 | 3.00 | 64.3 | 400 | 9.34 | 0.13 | 2.81 | 45 |
| 852 | 5.31 | 0.79 | 3.03 | 82.4 | 500 | 7.98 | 0.14 | 2.97 | 54 |
| 1062 | 4.28 | 0.99 | 3.03 | 104.4 | 600 | 7.03 | 0.23 | 3.00 | 61 |
| 1260 | 3.60 | 1.41 | 2.97 | 120.8 | 700 | 6.26 | 0.45 | 3.01 | 69 |
| 1607 | 2.89 | 1.72 | 2.90 | 133.7 | 800 | 5.62 | 0.69 | 3.03 | 77 |
| | | | | | 1000 | 4.55 | 0.91 | 3.04 | 98 |
| | | | | | 1200 | 3.77 | 1.31 | 2.99 | 116 |
| | | | | | 1500 | 3.04 | 1.62 | 2.91 | 131 |

a) Alternate value, 1.22 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 165 | HORIZON; July 31, 1952; 1729 GCT; 8°09'N, 84°58'W; sounding, 1729 fm; wind, 260°, force 3; weather, partly cloudy; sea, moderate; wire angle, 13°. | | | | | | | | |
| 0 | 27.64 | 4.72 | | | 0 | 27.64 | 4.72 | | |
| 10 | 27.46 | 4.71 | | | 10 | 27.46 | 4.71 | | |
| 24 | 27.16 | 4.75 | | | 20 | 27.27 | 4.74 | | |
| 51 | 19.84 | 1.93 | | | 30 | 26.10 | 4.72 | | |
| 75 | 16.86 | 1.08 | | | 50 | 20.50 | 2.10 | | |
| 102 | 15.39 | 0.96 | | | 75 | 16.86 | 1.08 | | |
| 152 | 13.74 | 0.93 | | | 100 | 15.50 | 0.96 | | |
| 202 | 12.89 | 0.55 | | | 150 | 13.81 | 0.94 | | |
| 302 | 11.28 | 0.38 | | | 200 | 12.92 | 0.57 | | |
| 409 | 9.08 | 0.11 | | | 250 | 12.15 | 0.47 | | |
| 510 | 7.47 | 0.15 | | | 300 | 11.34 | 0.38 | | |
| 612 | 6.48 | 0.23 | | | 400 | 9.25 | 0.10 | | |
| 810 | 5.34 | 0.65 | | | 500 | 7.59 | 0.15 | | |
| 1010 | 4.43 | 0.77 | | | 600 | 6.57 | 0.22 | | |
| 1204 | 3.80 | 1.19 | | | 700 | 5.92 | 0.49 | | |
| 1552 | 2.94 | 1.60 | | | 800 | 5.41 | 0.64 | | |
| | | | | | 1000 | 4.48 | 0.76 | | |
| | | | | | 1200 | 3.82 | 1.19 | | |
| | | | | | 1500 | 3.07 | 1.53 | | |
| 166 | HORIZON; August 1, 1952; 0418 GCT; 9°02.5'N, 85°02'W; sounding, 1870 fm; wind, 180°, force 1; weather, partly cloudy; sea, moderate; wire angle, 01°. | | | | | | | | |
| 0 | 27.77 | 4.57 | 0.51 | 0.7 | 0 | 27.77 | 4.57 | 0.51 | 0.7 |
| 10 | 27.61 | 4.72 | 0.50 | 0.9 | 10 | 27.61 | 4.72 | 0.50 | 0.9 |
| 25 | 26.44 | 4.77 | 0.49 | 0.5 | 20 | 27.50 | 4.74 | 0.49 | 0.5 |
| 54 | 18.24 | 1.35 | 1.88 | 14.2 | 30 | 26.45 | 4.70 | 0.50 | 1.2 |
| 78 | 15.70 | 0.89 | 2.06 | 18.2 | 50 | 20.00 | 1.72 | 1.76 | 12.3 |
| 107 | 14.74 | 0.73 | 2.10 | 18.0 | 75 | 15.84 | 0.90 | 2.05 | 18.0 |
| 162 | 13.96 | 0.67 | 2.17 | 18.5 | 100 | 14.91 | 0.74 | 2.10 | 18.1 |
| 215 | 13.16 | 0.51 | 2.26 | 20.5 | 150 | 14.13 | 0.68 | 2.16 | 18.0 |
| 321 | 10.86 | 0.18 | 2.54 | 30.4 | 200 | 13.40 | 0.58 | 2.23 | 20 |
| 432 | 8.47 | 0.09 | 2.86 | 50.2 | 250 | 12.46 | 0.39 | 2.35 | 23 |
| 539 | 7.13 | 0.11 | 2.92 | 61.4 | 300 | 11.34 | 0.22 | 2.48 | 28 |
| 645 | 6.48 | 0.32 | 2.95 | 67.0 | 400 | 9.12 | 0.10 | 2.78 | 45 |
| 852 | 5.10 | 0.57 | 3.01 | 87.7 | 500 | 7.50 | 0.10 | 2.90 | 58 |
| 1059 | 4.20 | 0.90 | 3.02 | 106.4 | 600 | 6.77 | 0.24 | 2.94 | 65 |
| 1257 | 3.64 | 1.17 | 3.05 | 122.2 | 700 | 6.10 | 0.40 | 2.97 | 71 |
| 1606 | 2.82 | 1.69 | 3.01 | 139.9 | 800 | 5.42 | 0.50 | 2.99 | 82 |
| | | | | | 1000 | 4.41 | 0.82 | 3.02 | 101 |
| | | | | | 1200 | 3.80 | 1.08 | 3.05 | 117 |
| | | | | | 1500 | 3.06 | 1.51 | 3.02 | 135 |

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; August 4, 1952; 0748 GCT; 9°30'N, 85°36'W; sounding, 1120 fm; wind, 240°, force 4; weather, cloudy; sea, rough; wire angle, 14°. 167

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.83 | 4.63 | | | 0 | 27.83 | 4.63 | | |
| 10 | 27.82 | 4.70 | | | 10 | 27.82 | 4.70 | | |
| 24 | 26.59 | 4.67 | | | 20 | 27.70 | 4.69 | | |
| 52 | 18.62 | 1.64 | | | 30 | 25.10 | 4.47 | | |
| 76 | 15.76 | 0.85 | | | 50 | 19.55 | 1.92 | | |
| 103 | 15.18 | 0.77 | | | 75 | 15.77 | 0.86 | | |
| 154 | 14.04 | 0.62 | | | 100 | 15.24 | 0.77 | | |
| 204 | 13.18 | 0.53 | | | 150 | 14.11 | 0.64 | | |
| 304 | 11.38 | 0.30 | | | 200 | 13.25 | 0.55 | | |
| 410 | 8.90 | 0.17 | | | 250 | 12.39 | 0.43 | | |
| 511 | 7.43 | 0.14 | | | 300 | 11.45 | 0.32 | | |
| 611 | 7.02 | 0.23 | | | 400 | 9.10 | 0.18 | | |
| 808 | 5.62 | 0.43 | | | 500 | 7.52 | 0.14 | | |
| 1006 | 4.72 | 0.64 | | | 600 | 7.09 | 0.22 | | |
| 1197 | 3.88 | 0.91 | | | 700 | 6.37 | 0.32 | | |
| 1538 | 3.10 | 1.53 | | | 800 | 5.67 | 0.42 | | |
| | | | | | 1000 | 4.75 | 0.63 | | |
| | | | | | 1200 | 3.86 | 0.93 | | |
| | | | | | 1500 | 3.16 | 1.47 | | |

HORIZON; August 4, 1952; 1544 GCT; 9°28.5'N, 86°38.5'W; sounding, 1710 fm; wind, 260°, force 2; weather, partly cloudy; sea, moderate; wire angle, 05°. 168

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.84 | 4.58 | 0.44 | 0 | 0 | 27.84 | 4.58 | 0.44 | 0 |
| 10 | 26.64 | 4.54 | 0.48 | 0 | 10 | 26.64 | 4.54 | 0.48 | 0 |
| 24 | 21.09 | 2.27 | 1.48 | 7.7 | 20 | 23.30 | 3.30 | 1.12 | 4.0 |
| 53 | 16.35 | 0.99 | 2.02 | 16.2 | 30 | 19.90 | 1.91 | 1.66 | 10.7 |
| 77 | 14.80 | 0.68 | 2.12 | 19.3 | 50 | 16.77 | 1.09 | 1.98 | 16.0 |
| 106 | 14.16 | 0.57 | 2.13 | 20.3 | 75 | 14.83 | 0.70 | 2.11 | 19.1 |
| 160 | 13.35 | 0.41 | 2.20 | 22.5 | 100 | 14.25 | 0.58 | 2.12 | 20.2 |
| 212 | 11.96 | 0.23 | 2.36 | 29.3 | 150 | 13.51 | 0.46 | 2.20 | 22 |
| 316 | 9.76 | 0.10 | 2.64 | 42.1 | 200 | 12.27 | 0.28 | 2.32 | 27 |
| 428 | 8.16 | 0.08 | 2.84 | 54.4 | 250 | 11.06 | 0.16 | 2.47 | 34 |
| 534 | 7.02 | 0.10 | 2.93 | 66.4 | 300 | 10.03 | 0.11 | 2.60 | 41 |
| 639 | 6.36 | 0.24 | 2.96a) | 70.9 | 400 | 8.54 | 0.08 | 2.79 | 52 |
| 842 | 5.30 | 0.43 | 3.01 | 86.6 | 500 | 7.35 | 0.09 | 2.91 | 63 |
| 1051 | 4.38 | 0.74 | 3.08 | 103.1 | 600 | 6.59 | 0.20 | 2.94 | 69 |
| 1247 | 3.68 | 1.07 | 3.06 | 119.5 | 700 | 6.01 | 0.28 | 2.97 | 75 |
| 1592 | 2.91 | 1.59 | 2.98 | 134.6 | 800 | 5.49 | 0.38 | 3.00 | 83 |
| | | | | | 1000 | 4.59 | 0.67 | 3.07 | 99 |
| | | | | | 1200 | 3.83 | 0.98 | 3.07 | 116 |
| | | | | | 1500 | 3.08 | 1.48 | 2.99 | 132 |

a) Mean value of 2.92 and 2.99 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| **169** | HORIZON; August 4, 1952; 2224 GCT; 9°11'N, 87°31'W; sounding, 1750 fm; wind, 250°, force 2; weather, cloudy; sea, moderate; wire angle, 09°. | | | | | | | | |
| 0 | 27.04 | 4.79 | | | 0 | 27.04 | 4.79 | | |
| 10 | 22.54 | 3.61 | | | 10 | 22.54 | 3.61 | | |
| 24 | 16.56 | 1.87 | | | 20 | 18.90 | 2.32 | | |
| 48 | 14.90 | 0.61 | | | 30 | 15.90 | 1.41 | | |
| 72 | 13.98 | 0.39 | | | 50 | 14.79 | 0.55 | | |
| 96 | 13.51 | 0.49 | | | 75 | 13.85 | 0.41 | | |
| 149 | 12.93 | 0.45 | | | 100 | 13.46 | 0.49 | | |
| 196 | 12.34 | 0.38 | | | 150 | 12.91 | 0.45 | | |
| 289 | 11.14 | 0.14 | | | 200 | 12.29 | 0.36 | | |
| 389 | 9.40 | 0.08 | | | 250 | 11.66 | 0.23 | | |
| 484 | 7.93 | 0.11 | | | 300 | 10.94 | 0.12 | | |
| 583 | 6.87 | 0.11 | | | 400 | 9.20 | 0.08 | | |
| 778 | 5.50 | 0.33 | | | 500 | 7.75 | 0.10 | | |
| 968 | 4.54 | 0.59 | | | 600 | 6.73 | 0.12 | | |
| 1162 | 3.92 | 1.03 | | | 700 | 6.01 | 0.23 | | |
| 1471 | 3.13 | 1.41 | | | 800 | 5.36 | 0.36 | | |
| | | | | | 1000 | 4.43 | 0.67 | | |
| | | | | | 1200 | 3.81 | 1.09 | | |
| | | | | | 1500 | (3.07) | (1.45) | | |
| **170** | HORIZON; August 5, 1952; 0830 GCT; 9°06'N, 88°32'W; sounding, 1790 fm; wind, 220°, force 1; weather, partly cloudy; sea, moderate; wire angle, 01°. | | | | | | | | |
| 0 | 26.72 | 4.63 | 0.66 | 0.2 | 0 | 26.72 | 4.63 | 0.66 | 0.2 |
| 10 | 19.92 | 3.01 | 1.28 | 7.4 | 10 | 19.92 | 3.01 | 1.28 | 7.4 |
| 25 | 17.42 | 1.43 | 1.81a) | 13.0 | 20 | 18.27 | 1.84 | 1.80 | 11.2 |
| 50 | 15.14 | 0.85 | 2.06 | 17.8 | 30 | 16.75 | 1.12 | 1.96 | 14.1 |
| 74 | 14.12 | 1.15 | 2.06 | 18.9 | 50 | 15.14 | 0.85 | 2.06 | 17.8 |
| 98 | 13.62 | 0.90 | 2.10 | 19.3 | 75 | 14.11 | 1.15 | 2.06 | 19.0 |
| 152 | 12.75 | 0.82 | 2.18 | 22.1 | 100 | 13.57 | 0.89 | 2.11 | 19.5 |
| 201 | 12.07 | 0.68 | 2.28 | 23.9 | 150 | 12.79 | 0.83 | 2.18 | 22 |
| 298 | 10.90 | 0.66 | 2.39 | 28.6 | 200 | 12.09 | 0.68 | 2.28 | 24 |
| 399 | 9.76 | 0.27 | 2.62 | 37.3 | 250 | 11.44 | 0.68 | 2.34 | 26 |
| 495 | 8.34 | 0.11 | 2.90 | 52.7 | 300 | 10.84 | 0.65 | 2.39 | 29 |
| 597 | 7.12 | 0.14 | 3.02 | 63.2 | 400 | 9.75 | 0.27 | 2.62 | 37 |
| 795 | 5.74 | 0.22 | 3.11 | 79.4 | 500 | 8.30 | 0.11 | 2.91 | 53 |
| 990 | 4.66 | 0.52 | 3.18 | 98.1 | 600 | 7.09 | 0.14 | 3.02 | 63 |
| 1187 | 3.92 | 0.89 | 3.18 | 111.2 | 700 | 6.34 | 0.17 | 3.07 | 71 |
| 1500 | 3.08 | 1.45 | 3.12 | 130.7 | 800 | 5.71 | 0.23 | 3.11 | 80 |
| | | | | | 1000 | 4.61 | 0.55 | 3.18 | 99 |
| | | | | | 1200 | 3.88 | 0.91 | 3.18 | 112 |
| | | | | | 1500 | 3.08 | 1.45 | 3.12 | 131 |

a) Alternate value, 1.90 µg at/L, not used in interpolation.

HORIZON; August 5, 1952; 1436 GCT; 8°11.5'N, 88°37.5'W; sounding, 1850 fm; wind, 250°, force 3; weather, cloudy; sea, moderate; wire angle, 10°. 171

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 26.78 | 4.60 | | | 0 | 26.78 | 4.60 | | |
| 10 | 26.38 | 4.48 | | | 10 | 26.38 | 4.48 | | |
| 25 | 20.60 | 2.84 | | | 20 | 22.75 | 4.12 | | |
| 49 | 15.60 | 0.92 | | | 30 | 19.35 | 2.10 | | |
| 73 | 14.37 | 0.70 | | | 50 | 15.40 | 0.91 | | |
| 97 | 13.79 | 0.64 | | | 75 | 14.32 | 0.69 | | |
| 150 | 13.26 | 0.54 | | | 100 | 13.74 | 0.63 | | |
| 198 | 12.65 | 0.49 | | | 150 | 13.26 | 0.54 | | |
| 293 | 11.48 | 0.58 | | | 200 | 12.63 | 0.49 | | |
| 392 | 10.16 | 0.22 | | | 250 | 11.99 | 0.54 | | |
| 487 | 8.47 | 0.10 | | | 300 | 11.38 | 0.55 | | |
| 585 | 7.34 | 0.14 | | | 400 | 10.00 | 0.23 | | |
| 779 | 5.70 | 0.35 | | | 500 | 8.30 | 0.10 | | |
| 971 | 4.78 | 0.58 | | | 600 | 7.20 | 0.16 | | |
| 1170 | 3.97 | 0.99 | | | 700 | 6.26 | 0.27 | | |
| 1486 | 3.07 | 1.49 | | | 800 | 5.59 | 0.37 | | |
| | | | | | 1000 | 4.65 | 0.63 | | |
| | | | | | 1200 | 3.87 | 1.05 | | |
| | | | | | 1500 | (3.03) | (1.49) | | |

HORIZON; August 5-6, 1952; 2245, 2312, 0056 GCT; 7°15'N, 88°46'W; sounding, 1880 fm; wind, 220°, force 4; weather, overcast; sea, rough; wire angle, 29°, 42°, 07°. 172

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.82 | 4.70 | 0.58 | 0 | 0 | 26.82 | 4.70 | 0.58 | 0 |
| 8 | 26.80 | 4.69 | 0.52 | 0 | 10 | 26.78 | 4.67 | 0.52 | 0 |
| 21 | 25.92 | 4.31 | 0.63 | 0.4 | 20 | 26.47 | 4.42 | 0.62 | 0.3 |
| 45 | 16.85 | 1.61 | 1.74 | 12.8 | 30 | 22.85 | 2.03 | 1.20 | 2.8 |
| 65 | 15.04 | 1.48 | 1.84 | 16.6 | 50 | 16.30 | 1.57 | 1.77 | 14.0 |
| 89 | 14.26 | 1.29 | 1.94 | 17.3 | 75 | 14.60 | 1.41 | 1.88 | 17 |
| 132 | 13.62 | 0.84 | 2.08 | 19.3 | 100 | 14.06 | 1.16 | 1.99 | 18 |
| 178 | 13.14 | 1.21 | 2.06 | 19.3 | 150 | 13.44 | 0.98 | 2.08 | 19 |
| | | | | | 200 | 12.85 | 1.00 | 2.12 | 21 |
| 243 | 12.13 | 0.60 | 2.24 | 24.8 | 250 | 12.03 | 0.60 | 2.26 | 26 |
| 328 | 10.66 | 0.58 | 2.33 | 30.6 | 300 | 11.12 | 0.59 | 2.30 | 29 |
| 409 | 9.50 | 0.14 | 2.69 | 42.7 | 400 | 9.63 | 0.16 | 2.66 | 41 |
| 493 | 8.11 | 0.14 | 2.81 | 53.5 | 500 | 8.03 | 0.15 | 2.82 | 54 |
| 658 | 6.42 | 0.36 | 2.91 | 67.3 | 600 | 6.92 | 0.29 | 2.87 | 63 |
| 827 | 5.42 | 0.50 | 3.12 | 82.8 | 700 | 6.15 | 0.38 | 2.97 | 71 |
| 994 | 4.68 | 0.90 | 3.04 | 95.4 | 800 | 5.56 | 0.46 | 3.09 | 81 |
| | | | | | 1000 | 4.68 | 0.92 | 3.04 | 96 |
| 1290 | 3.66 | 1.17 | 3.00 | 113.4 | 1200 | 3.93 | 1.14 | 3.02 | 108 |
| 1668 | 2.64 | 1.74 | 2.92 | 140.4 | 1500 | 3.04 | 1.49 | 2.94 | 129 |
| 1908 | 2.30 | 2.02 | 2.89 | 151.0 | 2000 | 2.20 | 2.14 | 2.86 | 155 |
| 2150 | 2.03 | 2.31 | 2.82 | 160.2 | 2500 | 1.84 | 2.44 | 2.74 | 162 |
| 2394 | 1.86 | 2.40 | 2.74 | 161.5 | 3000 | (1.83) | (2.62) | (2.66) | (159) |
| 2641 | 1.83 | 2.48 | 2.72 | 162.2 | | | | | |
| 2888 | 1.83 | 2.58 | 2.68 | 160.2 | | | | | |

173

HORIZON; August 6, 1952; 0906 GCT; 6°22'N, 88°54.5'W; sounding, 1820 fm; wind, 210°, force 4; weather, cloudy; sea, rough; wire angle, 33°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 26.65 | 4.64 | | | 0 | 26.65 | 4.64 | | |
| 8 | 26.65 | 4.76 | | | 10 | 26.65 | 4.75 | | |
| 21 | 26.66 | 4.67 | | | 20 | 26.66 | 4.68 | | |
| 46 | 18.76 | 1.57 | | | 30 | 26.57 | 3.38 | | |
| 66 | 17.24 | 1.64 | | | 50 | 18.36 | 1.58 | | |
| 91 | 14.94 | 1.70 | | | 75 | 16.00 | 1.67 | | |
| 136 | 13.76 | 1.30 | | | 100 | 14.60 | 1.66 | | |
| 180 | 13.18 | 0.97 | | | 150 | 13.56 | 1.16 | | |
| 270 | 12.08 | 0.61 | | | 200 | 12.94 | 0.87 | | |
| 364 | 10.26 | 0.29 | | | 250 | 12.36 | 0.69 | | |
| 449 | 8.71 | 0.13 | | | 300 | 11.54 | 0.51 | | |
| 540 | 7.42 | 0.23 | | | 400 | 9.60 | 0.20 | | |
| 717 | 6.23 | 0.54 | | | 500 | 7.90 | 0.16 | | |
| 896 | 5.11 | 0.71 | | | 600 | 7.00 | 0.33 | | |
| 1068 | 4.36 | 1.06 | | | 700 | 6.35 | 0.51 | | |
| 1390 | 3.39 | 1.48 | | | 800 | 5.68 | 0.59 | | |
| | | | | | 1000 | 4.64 | 0.94 | | |
| | | | | | 1200 | 3.90 | 1.24 | | |

174

HORIZON; August 6, 1952; 1815 GCT; 5°05'N, 88°49'W; sounding, 1650 fm; wind, 210°, force 4; weather, partly cloudy; sea, rough; wire angle, 13°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.66 | 4.63 | 0.40 | 0 | 0 | 26.66 | 4.63 | 0.40 | 0 |
| 10 | 26.60 | 4.69 | 0.36 | 0 | 10 | 26.60 | 4.69 | 0.36 | 0 |
| 25 | 26.57 | 4.67 | 0.34 | 0 | 20 | 26.59 | 4.68 | 0.34 | 0 |
| 53 | 17.36 | 1.76 | 1.68 | 13.1 | 30 | 26.49 | 4.59 | 0.35 | 0.7 |
| 77 | 16.14 | 1.51 | 1.78 | 13.7 | 50 | 18.80 | 2.70 | 1.60 | 12.0 |
| 105 | 14.82 | 1.34 | 1.87 | 19.1 | 75 | 16.15 | 1.53 | 1.77 | 13.7 |
| 157 | 13.57 | 1.38 | 1.90 | 22.5 | 100 | 15.00 | 1.35 | 1.86 | 17.9 |
| 208 | 12.99 | 0.65 | 2.14 | 28.6 | 150 | 13.66 | 1.37 | 1.90 | 22 |
| 310 | 11.56 | 0.31 | 2.38 | 40.7 | 200 | 13.06 | 0.73 | 2.10 | 28 |
| 418 | 9.73 | 0.20 | 2.63 | 53.5 | 250 | 12.43 | 0.46 | 2.24 | 34 |
| 522 | 7.68 | 0.28 | 2.82 | 53.6 | 300 | 11.73 | 0.34 | 2.36 | 40 |
| 626 | 6.78 | 0.37 | 2.87 | 62.3 | 400 | 10.13 | 0.20 | 2.60 | 51 |
| 831 | 5.45 | 0.74 | 2.91 | 80.1 | 500 | 8.03 | 0.27 | 2.78 | 54 |
| 1036 | 4.58 | 1.06 | 2.88 | 96.1 | 600 | 6.97 | 0.33 | 2.86 | 60 |
| 1232 | 3.78 | 1.29 | 2.82 | 115.2 | 700 | 6.25 | 0.47 | 2.88 | 69 |
| 1576 | 2.86 | 1.84 | 2.74a) | 128.9 | 800 | 5.63 | 0.69 | 2.91 | 78 |
| | | | | | 1000 | 4.73 | 1.02 | 2.89 | 93 |
| | | | | | 1200 | 3.90 | 1.25 | 2.83 | 112 |
| | | | | | 1500 | 3.02 | 1.71 | 2.76 | 126 |

a) Mean value of 2.71 and 2.78 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; August 7, 1952; 0200 GCT; 4°11.5'N, 89°03'W; sounding, 1300 fm; wind, 170°, force 4; weather, cloudy; sea, moderate; wire angle, 12°. 175

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.37 | 4.63 | | | 0 | 26.37 | 4.63 | | |
| 10 | 26.34 | 4.74 | | | 10 | 26.34 | 4.74 | | |
| 25 | 26.35 | 4.72 | | | 20 | 26.35 | 4.74 | | |
| 54 | 20.51 | 3.38 | | | 30 | 26.32 | 4.67 | | |
| 77 | 15.94 | 1.68 | | | 50 | 22.00 | 3.93 | | |
| 106 | 14.51 | 1.99 | | | 75 | 16.10 | 1.68 | | |
| 156 | 13.56 | 1.34 | | | 100 | 14.68 | 1.97 | | |
| 206 | 12.99 | 0.99 | | | 150 | 13.62 | 1.40 | | |
| 306 | 11.48 | 0.26 | | | 200 | 13.05 | 1.04 | | |
| 412 | 9.48 | 0.20 | | | 250 | 12.35 | 0.62 | | |
| 515 | 7.97 | 0.23 | | | 300 | 11.56 | 0.29 | | |
| 617 | 7.10 | 0.44 | | | 400 | 9.69 | 0.20 | | |
| 819 | 5.56 | 0.73 | | | 500 | 8.14 | 0.21 | | |
| 1021 | 4.53 | 1.11 | | | 600 | 7.26 | 0.42 | | |
| 1215 | 3.84 | 1.43 | | | 700 | 6.41 | 0.56 | | |
| 1556 | 2.90 | 1.88 | | | 800 | 5.68 | 0.71 | | |
| | | | | | 1000 | 4.64 | 1.08 | | |
| | | | | | 1200 | 3.89 | 1.44 | | |
| | | | | | 1500 | 3.04 | 1.81 | | |

HORIZON; August 7, 1952; 0908 GCT; 3°09.5'N, 89°08'W; sounding, 860 fm; wind, 220°, force 4; weather, overcast; sea, moderate; wire angle, 08°. 176

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.85 | 4.74 | 0.30 | 0 | 0 | 25.85 | 4.74 | 0.30 | 0 |
| 10 | 25.84 | 4.81 | 0.31a) | 0 | 10 | 25.84 | 4.81 | 0.31 | 0 |
| 25 | 25.87 | 4.87 | 0.33 | 0 | 20 | 25.86 | 4.86 | 0.32 | 0 |
| 53 | 20.38 | 3.40 | 1.08 | 7.7 | 30 | 25.85 | 4.81 | 0.35 | 0.8 |
| 77 | 16.04 | 2.07 | 1.58 | 13.0 | 50 | 20.55 | 3.72 | 1.93 | 6.8 |
| 105 | 14.47 | 1.58 | 1.83 | 16.6 | 75 | 16.25 | 2.12 | 1.56 | 12.8 |
| 157 | 13.46 | 1.18 | 1.95 | 19.6 | 100 | 14.67 | 1.65 | 1.80 | 16.3 |
| 210 | 12.98 | 0.94 | 2.08 | 22.0 | 150 | 13.52 | 1.20 | 1.93 | 19.3 |
| 316 | 11.10 | 0.32 | 2.46 | 30.8 | 200 | 13.06 | 1.01 | 2.06 | 21.2 |
| 425 | 8.46 | 0.30 | 2.76 | 46.4 | 250 | 12.40 | 0.67 | 2.20 | 25 |
| 530 | 7.27 | 0.46 | 2.83 | 56.3 | 300 | 11.44 | 0.38 | 2.40 | 29 |
| 632 | 6.53 | 0.58 | 2.88 | 64.1 | 400 | 8.98 | 0.30 | 2.70 | 43 |
| 836 | 5.38 | 1.07 | 2.88 | 79.6 | 500 | 7.54 | 0.40 | 2.82 | 54 |
| 1029 | 4.42 | 1.31 | 2.92 | 97.4 | 600 | 6.76 | 0.52 | 2.87 | 62 |
| 1214 | 3.86 | 1.50 | 2.92 | 110.0 | 700 | 6.12 | 0.76 | 2.88 | 70 |
| 1555 | 2.98 | 1.92 | 2.88 | 129.8 | 800 | 5.54 | 1.01 | 2.88 | 78 |
| | | | | | 1000 | 4.52 | 1.29 | 2.92 | 95 |
| | | | | | 1200 | 3.90 | 1.48 | 2.92 | 109 |
| | | | | | 1500 | 3.12 | 1.86 | 2.90 | 127 |

a) Alternate value, 0.17 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

177 HORIZON; August 7, 1952; 1659 GCT; 2°07'N, 89°12.5'W; sounding, 1290 fm; wind, 170°, force 4; weather, cloudy; sea, rough; wire angle, 02°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.13 | 4.79 | | | 0 | 24.13 | 4.79 | | |
| 10 | 24.10 | 4.84 | | | 10 | 24.10 | 4.84 | | |
| 24 | 23.94 | 4.82 | | | 20 | 23.98 | 4.83 | | |
| 53 | 20.63 | 3.66 | | | 30 | 23.91 | 4.77 | | |
| 77 | 15.01 | 2.53 | | | 50 | 21.40 | 4.04 | | |
| 106 | 14.62 | 2.40 | | | 75 | 15.04 | 2.54 | | |
| 159 | 13.92 | 1.98 | | | 100 | 14.70 | 2.43 | | |
| 213 | 13.48 | 1.50 | | | 150 | 14.04 | 2.04 | | |
| 320 | 11.58 | 0.42 | | | 200 | 13.58 | 1.63 | | |
| 431 | 8.55 | 0.34 | | | 250 | 13.03 | 1.02 | | |
| 536 | 7.36 | 0.54 | | | 300 | 12.07 | 0.53 | | |
| 642 | 6.42 | 0.88 | | | 400 | 9.15 | 0.36 | | |
| 849 | 5.35 | 1.37 | | | 500 | 7.74 | 0.37 | | |
| 1058 | 4.26 | 1.50 | | | 600 | 6.74 | 0.46 | | |
| 1259 | 3.80 | 1.59 | | | 700 | 6.12 | 1.04 | | |
| 1606 | 2.88 | 1.98 | | | 800 | 5.61 | 1.29 | | |
| | | | | | 1000 | 4.52 | 1.46 | | |
| | | | | | 1200 | 3.94 | 1.54 | | |
| | | | | | 1500 | 3.20 | 1.78 | | |

178 HORIZON; August 8, 1952; 0003, 0041 GCT; 1°10'N, 89°28'W; sounding, 1260 fm; wind, 180°, force 4; weather, cloudy; sea, moderate; wire angle, 33°, 10°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.69 | 4.81 | 0.50 | 0.4 | 0 | 22.69 | 4.81 | 0.50 | 0.4 |
| 7 | 22.67 | 4.82 | 0.44 | 0.4 | 10 | 22.67 | 4.83 | 0.43 | 0.8 |
| 19 | 22.66 | 4.83 | 0.42 | 1.3 | 20 | 22.66 | 4.83 | 0.42 | 1.3 |
| 42 | 22.32 | 4.62 | 0.46 | 1.4 | 30 | 22.64 | 4.82 | 0.44 | 1.3 |
| 60 | 15.49 | 2.22 | 1.46 | 14.6 | 50 | 19.50 | 3.25 | 0.50 | 2.8 |
| 82 | 14.82 | 2.00 | 1.54 | 14.9 | 75 | 14.96 | 2.03 | 1.53 | 14.9 |
| 122 | 14.40 | 2.28 | 1.50 | 14.8 | 100 | 14.62 | 2.12 | 1.53 | 14.8 |
| | | | | | 150 | 14.19 | 2.26 | 1.54 | 15.2 |
| 211 | 13.74 | 1.75 | 1.70 | 16.9 | 200 | 13.84 | 1.90 | 1.67 | 16.6 |
| 314 | 12.06 | 0.56 | 2.14 | 26.3 | 250 | 13.36 | 1.19 | 1.88 | 20 |
| 416 | 8.69 | 0.47 | 2.47 | 43.6 | 300 | 12.47 | 0.66 | 2.08 | 25 |
| 516 | 7.86 | 0.68 | 2.59 | 48.8 | 400 | 8.96 | 0.47 | 2.43 | 41 |
| 617 | 7.26 | 0.80 | 2.64a) | 54.7 | 500 | 7.95 | 0.65 | 2.58 | 48 |
| 812 | 5.80 | 1.18 | 2.72 | 70.4 | 600 | 7.37 | 0.78 | 2.63 | 54 |
| 1006 | 4.88 | 1.50 | 2.90 | 84.8 | 700 | 6.64 | 0.97 | 2.67 | 62 |
| 1189 | 4.04 | 1.88 | 2.94 | 106.4 | 800 | 5.90 | 1.16 | 2.72 | 69 |
| 1510 | 3.08 | 1.96 | 2.86 | 130.7 | 1000 | 4.91 | 1.50 | 2.90 | 84 |
| | | | | | 1200 | 4.00 | 1.90 | 2.94 | 107 |
| | | | | | 1500 | 3.10 | 1.96 | 2.87 | 130 |

a) Mean value of 2.60 and 2.68 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; August 8, 1952; 0709 GCT; 0°18'N, 89°40'W; sounding, 1140 fm; wind, 180°, force 3; weather, overcast; sea, moderate; wire angle, 22°. 179

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.02 | 4.60 | | | 0 | 20.02 | 4.60 | | |
| 9 | 19.98 | 4.57 | | | 10 | 19.97 | 4.56 | | |
| 23 | 18.92 | 3.96 | | | 20 | 19.35 | 4.20 | | |
| 51 | 16.68 | 2.83 | | | 30 | 18.50 | 3.70 | | |
| 74 | 14.90 | 2.18 | | | 50 | 16.93 | 2.90 | | |
| 101 | 14.60 | 2.02 | | | 75 | 14.89 | 2.17 | | |
| 151 | 14.10 | 1.97 | | | 100 | 14.64 | 2.03 | | |
| 203 | 13.56 | 2.09 | | | 150 | 14.11 | 1.97 | | |
| 305 | 12.04 | 0.76 | | | 200 | 13.60 | 1.13 | | |
| 412 | 9.48 | 0.34 | | | 250 | 12.98 | 0.88 | | |
| 516 | 8.14 | 0.60 | | | 300 | 12.16 | 0.78 | | |
| 617 | 7.30 | 0.85 | | | 400 | 9.70 | 0.36 | | |
| 819 | 6.02 | 1.13 | | | 500 | 8.31 | 0.56 | | |
| 1020 | 4.72 | 1.46 | | | 600 | 7.41 | 0.81 | | |
| 1214 | 3.92 | 1.62 | | | 700 | 6.75 | 0.98 | | |
| 1549 | 3.00 | 1.95 | | | 800 | 6.15 | 1.12 | | |
| | | | | | 1000 | 4.85 | 1.44 | | |
| | | | | | 1200 | 3.97 | 1.61 | | |
| | | | | | 1500 | 3.10 | 1.93 | | |

HORIZON; August 8, 1952; 1207 GCT; 0°03.5'S, 89°35'W; sounding, 900 fm; wind, 190°, force 2; weather, overcast; sea, slight; wire angle, 15°. 180

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.90 | 4.53 | 0.76 | 0 | 0 | 19.90 | 4.53 | 0.76 | 0 |
| 9 | 18.32 | 3.75 | 0.94 | 2.0 | 10 | 18.15 | 3.70 | 0.99 | 1.8 |
| 23 | 15.07 | 2.29 | 1.49 | 13.5 | 20 | 15.75 | 2.70 | 1.40 | 13.0 |
| 51 | 14.69 | 2.00 | 1.58 | 15.5 | 30 | 14.93 | 2.19 | 1.53 | 14.3 |
| 74 | 14.52 | 1.99 | 1.62 | 16.9 | 50 | 14.69 | 2.01 | 1.58 | 15.4 |
| 101 | 14.32 | 1.98 | 1.62 | 17.5 | 75 | 14.51 | 1.99 | 1.62 | 17.0 |
| 152 | 14.06 | 1.84 | 1.65 | 15.7 | 100 | 14.33 | 1.98 | 1.62 | 17.5 |
| 202 | 13.49 | 1.96 | 1.69 | 16.9 | 150 | 14.07 | 1.85 | 1.65 | 15.8 |
| 302 | 11.91 | 0.73 | 2.15 | 26.6 | 200 | 13.51 | 1.96 | 1.69 | 16.8 |
| 407 | 9.53 | 0.42 | 2.36a) | 39.1 | 250 | 12.86 | 1.43 | 1.89 | 21 |
| 508 | 8.07 | 0.70 | 2.50b) | 46.4 | 300 | 11.98 | 0.78 | 2.14 | 26 |
| 610 | 7.41 | 0.87 | 2.57 | 51.1 | 400 | 9.66 | 0.42 | 2.35 | 38 |
| 833 | 5.82 | 1.22 | 2.65 | 62.3 | 500 | 8.16 | 0.66 | 2.49 | 46 |
| 1035 | 4.58 | 1.53 | 2.70 | 92.0 | 600 | 7.49 | 0.86 | 2.56 | 51 |
| 1228 | 3.88 | 1.60 | 2.72 | 108.2 | 700 | 6.79 | 0.99 | 2.61 | 55 |
| 1568 | 2.98 | 1.96 | 2.66 | 131.0 | 800 | 6.06 | 1.17 | 2.64 | 61 |
| | | | | | 1000 | 4.76 | 1.52 | 2.69 | 86 |
| | | | | | 1200 | 3.97 | 1.54 | 2.72 | 106 |
| | | | | | 1500 | 3.12 | 1.90 | 2.69 | 126 |

a) Alternate value, 2.45 µg at/L, not used in interpolation.
b) Alternate value, 2.59 µg at/L, not used in interpolation.

181 HORIZON; August 9, 1952; 1443 GCT; 2°59.5'S, 90°06'W; sounding, 1700 fm; wind, 120°, force 3; weather, cloudy; sea, moderate; wire angle, 27°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 19.39 | 4.78 | | | 0 | 19.39 | 4.78 | | |
| 8 | 19.38 | 4.76 | | | 10 | 19.37 | 4.76 | | |
| 21 | 19.29 | 4.76 | | | 20 | 19.30 | 4.76 | | |
| 47 | 18.10 | 4.16 | | | 30 | 19.24 | 4.67 | | |
| 67 | 17.36 | 3.64 | | | 50 | 17.93 | 4.08 | | |
| 91 | 17.06 | 3.00 | | | 75 | 17.22 | 3.43 | | |
| 136 | 14.17 | 1.64 | | | 100 | 17.01 | 2.65 | | |
| 181 | 13.57 | 1.52 | | | 150 | 13.92 | 1.58 | | |
| 271 | 12.30 | 0.47 | | | 200 | 13.32 | 1.43 | | |
| 370 | 10.02 | 0.10 | | | 250 | 12.63 | 0.73 | | |
| 464 | 8.14 | 0.39 | | | 300 | 11.70 | 0.27 | | |
| 559 | 7.18 | 0.74 | | | 400 | 9.30 | 0.14 | | |
| 748 | 5.73 | 1.19 | | | 500 | 7.76 | 0.52 | | |
| 935 | 4.76 | 1.44 | | | 600 | 6.81 | 0.86 | | |
| 1116 | 4.10 | 1.68 | | | 700 | 6.04 | 1.09 | | |
| 1450 | 3.10 | 1.97 | | | 800 | 5.43 | 1.26 | | |
| | | | | | 1000 | 4.50 | 1.53 | | |
| | | | | | 1200 | 3.83 | 1.76 | | |
| | | | | | 1500 | (2.98) | (1.99) | | |

182 HORIZON; August 9, 1952; 2043 GCT; 2°20.5'S, 90°28.5'W; sounding, 1700 fm; wind, 220°, force 3; weather, overcast; sea, slight; wire angle, 14°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.46 | 4.72 | 0.98 | 6.5 | 0 | 19.46 | 4.72 | 0.97 | 6.5 |
| 10 | 18.04 | 4.31 | 1.08 | 8.3 | 10 | 18.04 | 4.31 | 1.08 | 8.3 |
| 24 | 15.90 | 3.36 | 1.34 | 13.0 | 20 | 16.16 | 3.67 | 1.27 | 12.2 |
| 53 | 15.42 | 2.49 | 1.54 | 13.3 | 30 | 15.79 | 3.12 | 1.40 | 13.2 |
| 77 | 15.12 | 2.38 | 1.54 | 14.4 | 50 | 15.49 | 2.54 | 1.53 | 13.3 |
| 104 | 14.94 | 2.57 | 1.52 | 14.4 | 75 | 15.14 | 2.38 | 1.54 | 14.4 |
| 156 | 13.84 | 2.50 | 1.72 | 15.3 | 100 | 14.99 | 2.54 | 1.52 | 14.4 |
| 207 | 13.66 | 2.19 | 1.76 | 17.1 | 150 | 13.91 | 2.51 | 1.71 | 15.2 |
| 309 | 12.26 | 0.29 | 2.37 | 27.2 | 200 | 13.70 | 2.27 | 1.76 | 17 |
| 416 | 9.05 | 0.36 | 2.60a) | 45.0 | 250 | 13.21 | 1.10 | 1.98 | 20 |
| 519 | 7.60 | 1.19 | 2.64 | 42.1 | 300 | 12.43 | 0.33 | 2.31 | 26 |
| 621 | 6.77 | 1.15 | 2.74 | 54.7 | 400 | 9.38 | 0.33 | 2.63 | 43 |
| 824 | 5.11 | 1.72 | 2.77 | 76.0 | 500 | 7.80 | 1.10 | 2.64 | 50 |
| 1026 | 4.26 | 1.72 | 2.80 | 97.4 | 600 | 6.96 | 1.16 | 2.72 | 54 |
| 1219 | 3.74 | 1.84 | 2.82 | 108.2 | 700 | 6.05 | 1.41 | 2.77 | 62 |
| 1559 | 2.92 | 2.11 | 2.82 | 128.5 | 800 | 5.28 | 1.69 | 2.77 | 73 |
| | | | | | 1000 | 4.34 | 1.72 | 2.80 | 95 |
| | | | | | 1200 | 3.80 | 1.83 | 2.82 | 107 |
| | | | | | 1500 | 3.06 | 2.08 | 2.82 | 128 |

a) Mean value of 2.57 and 2.64 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; August 10, 1952; 0134 GCT; 1°52.5'S, 90°48'W; sounding, 1750 fm; wind, 140°, force 2; weather, drizzle; sea, moderate; wire angle, 18°. 183

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.58 | 4.46 | | | 0 | 18.58 | 4.46 | | |
| 10 | 16.67 | 3.70 | | | 10 | 16.67 | 3.70 | | |
| 24 | 16.18 | 3.66 | | | 20 | 16.27 | 3.66 | | |
| 51 | 15.36 | 3.01 | | | 30 | 16.06 | 3.60 | | |
| 74 | 14.41 | 2.61 | | | 50 | 15.62 | 3.07 | | |
| 101 | 13.76 | 2.34 | | | 75 | 14.39 | 2.60 | | |
| 153 | 13.43 | 2.52 | | | 100 | 13.79 | 2.34 | | |
| 202 | 13.41 | 2.53 | | | 150 | 13.44 | 2.50 | | |
| 303 | 12.38 | 0.85 | | | 200 | 13.52 | 2.53 | | |
| 408 | 8.86 | 0.36 | | | 250 | 13.14 | 1.94 | | |
| 508 | 7.83 | 0.94 | | | 300 | 12.44 | 0.89 | | |
| 610 | 7.12 | 1.28 | | | 400 | 9.01 | 0.36 | | |
| 810 | 5.26 | 1.67 | | | 500 | 7.90 | 0.90 | | |
| | | | | | 600 | 7.21 | 1.24 | | |
| | | | | | 700 | 6.30 | 1.53 | | |
| | | | | | 800 | 5.34 | 1.64 | | |

HORIZON; August 10, 1952; 0836 GCT; 1°12'S, 91°06'W; sounding, 1010 fm; wind, 230°, force 3; weather, drizzle; sea, moderate; wire angle, 13°. 184

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.91 | 4.60 | 0.81 | 5.8 | 0 | 18.91 | 4.60 | 0.81 | 5.8 |
| 10 | 18.18 | 4.44 | 0.88 | 7.2 | 10 | 18.18 | 4.44 | 0.88 | 7.2 |
| 24 | 16.00 | 3.61 | 1.13 | 8.5 | 20 | 16.55 | 3.82 | 1.04 | 8.3 |
| 53 | 14.80 | 2.92 | 1.30 | 12.2 | 30 | 15.67 | 3.37 | 1.18 | 9.2 |
| 76 | 14.34 | 2.80 | 1.36 | 13.9 | 50 | 14.89 | 2.97 | 1.29 | 12.0 |
| 104 | 14.03 | 2.61 | 1.38 | 15.5 | 75 | 14.35 | 2.81 | 1.36 | 13.8 |
| 156 | 13.78 | 2.54 | 1.44 | 16.0 | 100 | 14.07 | 2.63 | 1.38 | 15.4 |
| 208 | 13.07 | 2.03 | 1.60 | 19.4 | 150 | 13.79 | 2.54 | 1.43 | 16 |
| 312 | 11.88 | 0.64 | 2.16 | 28.1 | 200 | 13.16 | 2.15 | 1.58 | 19 |
| 420 | 9.08 | 0.47 | 2.47a) | 38.3 | 250 | 12.69 | 1.37 | 1.83 | 23 |
| 525 | 7.87 | 0.86 | 2.55 | 46.4 | 300 | 12.10 | 0.74 | 2.10 | 27 |
| 628 | 7.25 | 0.99 | 2.57 | 52.6 | 400 | 9.50 | 0.47 | 2.48 | 37 |
| 832 | 5.08 | 1.68 | 2.60 | 77.4 | 500 | 8.04 | 0.77 | 2.55 | 45 |
| | | | | | 600 | 7.44 | 0.93 | 2.56 | 51 |
| | | | | | 700 | 6.55 | 1.18 | 2.58 | 60 |
| | | | | | 800 | 5.42 | 1.54 | 2.60 | 73 |

HORIZON; August 11, 1952; 1640 GCT; 0°19.5'N, 91°29.5'W; sounding, 1640 fm; wind, 180°, force 2; weather, partly cloudy; sea, smooth; wire angle, 04°. 185

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.29 | 4.78 | | | 0 | 22.29 | 4.78 | | |
| 10 | 21.06 | 4.67 | | | 10 | 21.06 | 4.67 | | |
| 24 | 18.06 | 3.98 | | | 20 | 18.50 | 4.11 | | |
| 53 | 15.86 | 3.58 | | | 30 | 17.68 | 3.90 | | |
| 77 | 14.84 | 2.98 | | | 50 | 16.30 | 3.62 | | |
| 105 | 14.48 | 2.77 | | | 75 | 14.85 | 2.99 | | |
| 158 | 13.62 | 2.33 | | | 100 | 14.56 | 2.80 | | |
| 211 | 13.00 | 1.86 | | | 150 | 13.74 | 2.40 | | |
| 317 | 11.33 | 0.44 | | | 200 | 13.16 | 1.99 | | |
| 428 | 9.18 | 0.43 | | | 250 | 12.46 | 1.23 | | |
| 533 | 7.59 | 0.93 | | | 300 | 11.63 | 0.53 | | |
| 640 | 6.74 | 1.01 | | | 400 | 9.70 | 0.43 | | |
| 847 | 5.18 | 1.44 | | | 500 | 8.00 | 0.80 | | |
| 1053 | 4.04 | 1.76 | | | 600 | 7.04 | 0.98 | | |
| 1252 | 3.76 | 1.83 | | | 700 | 6.33 | 1.12 | | |
| 1597 | 2.86 | 2.08 | | | 800 | 5.57 | 1.33 | | |
| | | | | | 1000 | 4.20 | 1.74 | | |
| | | | | | 1200 | 3.88 | 1.81 | | |
| | | | | | 1500 | 3.06 | 2.03 | | |

a) Mean value of 2.41 and 2.53 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 186 | HORIZON; August 11, 1952; 2203, 2311 GCT; 0°59'N, 91°45'W; sounding, 1270 fm; wind, 240°, force 1; weather, overcast; sea, slight; wire angle, 25°, 00°. | | | | | | | | |
| 0 | 22.89 | 4.89 | 0.50 | 1.4 | 0 | 22.89 | 4.89 | 0.50 | 1.4 |
| 9 | 22.69 | 4.89 | 0.48a) | 2.9 | 10 | 22.40 | 4.88 | 0.74 | 3.1 |
| 21 | 19.74 | 4.33 | 0.86 | 5.9 | 20 | 20.07 | 4.34 | 0.85 | 5.8 |
| 47 | 15.34 | 3.08 | 1.38 | 12.8 | 30 | 17.95 | 3.89 | 1.12 | 8.0 |
| 68 | 14.02 | 2.57 | 1.48 | 19.3 | 50 | 15.05 | 2.94 | 1.41 | 14.0 |
| 93 | 13.60 | 2.60 | 1.54 | 16.7 | 75 | 13.84 | 2.58 | 1.51 | 19 |
| 140 | 13.52 | 2.55 | 1.56 | 15.5 | 100 | 13.57 | 2.60 | 1.54 | 16 |
| 189 | 13.36 | 2.03 | 1.79 | 19.4 | 150 | 13.50 | 2.50 | 1.58 | 16 |
| 288 | 12.30 | 0.94 | 2.19 | 26.8 | 200 | 13.31 | 1.90 | 1.84 | 20 |
| 391 | 9.56 | 0.40 | 2.69 | 40.7 | 250 | 12.90 | 1.31 | 2.02 | 24 |
| 490 | 8.30 | 0.58 | 2.72 | 45.2 | 300 | 11.97 | 0.83 | 2.26 | 28 |
| 587 | 7.45 | 0.95 | 2.75 | 50.0 | 400 | 9.40 | 0.40 | 2.69 | 41 |
| 781 | 5.91 | 1.32 | 2.78 | 68.8 | 500 | 8.20 | 0.45 | 2.73 | 46 |
| | | | | | 600 | 7.35 | 0.98 | 2.75 | 51 |
| 1052 | 4.22 | 1.61 | 2.78 | 103.9 | 700 | 6.56 | 1.20 | 2.76 | 61 |
| 1243 | 3.62 | 1.82 | 2.79 | 117.4 | 800 | 5.78 | 1.36 | 2.78 | 71 |
| 1576 | 2.94 | 2.10 | 2.77 | 131.0 | 1000 | 4.46 | 1.57 | 2.78 | 97 |
| | | | | | 1200 | 3.76 | 1.79 | 2.79 | 115 |
| | | | | | 1500 | 3.07 | 2.05 | 2.79 | 128 |
| 187 | HORIZON; August 12, 1952; 1154 GCT; 1°39.5'N, 92°05'W; sounding, 1090 fm; wind, 200°, force 4; weather, drizzle; sea, moderate; wire angle, 06°. | | | | | | | | |
| 0 | 24.72 | 4.74 | | | 0 | 24.72 | 4.74 | | |
| 10 | 24.72 | 4.76 | | | 10 | 24.72 | 4.76 | | |
| 24 | 23.28 | 4.76 | | | 20 | 24.62 | 4.76 | | |
| 52 | 15.65 | 2.64 | | | 30 | 21.87 | 4.68 | | |
| 76 | 14.67 | 2.44 | | | 50 | 16.50 | 2.74 | | |
| 104 | 14.21 | 2.58 | | | 75 | 14.68 | 2.44 | | |
| 157 | 13.68 | 2.31 | | | 100 | 14.29 | 2.56 | | |
| 209 | 13.38 | 2.23 | | | 150 | 13.73 | 2.35 | | |
| 314 | 11.97 | 0.68 | | | 200 | 13.43 | 2.25 | | |
| 425 | 9.52 | 0.33 | | | 250 | 12.95 | 1.70 | | |
| 530 | 7.85 | 0.58 | | | 300 | 12.21 | 0.85 | | |
| 634 | 7.01 | 0.67 | | | 400 | 10.14 | 0.33 | | |
| 840 | 5.36 | 1.36 | | | 500 | 8.19 | 0.50 | | |
| 1049 | 4.26 | 1.56 | | | 600 | 7.31 | 0.62 | | |
| 1248 | 3.70 | 1.73 | | | 700 | 6.46 | 0.90 | | |
| 1594 | 2.80 | 2.16 | | | 800 | 5.66 | 1.24 | | |
| | | | | | 1000 | 4.47 | 1.54 | | |
| | | | | | 1200 | 3.82 | 1.69 | | |
| | | | | | 1500 | 3.04 | 2.08 | | |

a) Alternate value, 0.73 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| HORIZON; August 12, 1952; 2012 GCT; 1°06.5'N, 93°14.5'W; sounding, 1490 fm; wind, 180°, force 3; weather, overcast; sea, moderate; wire angle, 20°. | | | | | | | | | 188 |
| 0 | 23.33 | 4.91 | 0.53 | 1.6 | 0 | 23.33 | 4.91 | 0.53 | 1.6 |
| 9 | 23.00 | 4.88 | 0.54 | 1.6 | 10 | 22.97 | 4.87 | 0.55 | 1.6 |
| 23 | 22.00 | 4.78 | 0.64 | 2.0 | 20 | 22.25 | 4.83 | 0.62 | 1.8 |
| 51 | 15.06 | 2.84 | 1.45 | 13.7 | 30 | 20.50 | 4.69 | 0.82 | 3.3 |
| 72 | 13.97 | 2.36 | 1.62 | 15.5 | 50 | 15.53 | 2.95 | 1.44 | 13.5 |
| 98 | 13.76 | 2.36 | 1.62 | 15.5 | 75 | 13.94 | 2.36 | 1.62 | 15.5 |
| 145 | 13.47 | 2.31 | 1.64 | 13.1 | 100 | 13.74 | 2.35 | 1.62 | 15.3 |
| 192 | 13.19 | 2.16 | 1.72 | 16.4 | 150 | 13.44 | 2.30 | 1.75 | 13.1 |
| 286 | 11.24 | 0.39 | 2.40 | 18.2 | 200 | 13.09 | 2.06 | 2.08 | 16.6 |
| 386 | 9.61 | 0.36 | 2.68 | 40.0 | 250 | 12.02 | 0.84 | 2.68 | 17 |
| 482 | 8.09 | 0.64 | 2.68 | 48.2 | 300 | 11.01 | 0.37 | 2.46 | 20 |
| 579 | 7.47 | 0.79 | 2.68 | 52.6 | 400 | 9.36 | 0.38 | 2.68 | 41 |
| 764 | 5.74 | 1.32 | 2.75 | 71.3 | 500 | 7.95 | 0.67 | 2.68 | 49 |
| 954 | 4.89 | 1.61 | 2.73 | 84.8 | 600 | 7.27 | 0.84 | 2.68 | 54 |
| 1138 | 3.94 | 1.78 | 2.75 | 107.8 | 700 | 6.22 | 1.14 | 2.73 | 64 |
| 1481 | 3.02 | 2.02 | 2.75 | 133.4 | 800 | 5.59 | 1.39 | 2.75 | 74 |
| | | | | | 1000 | 4.64 | 1.66 | 2.72 | 90 |
| | | | | | 1200 | 3.71 | 1.83 | 2.75 | 114 |
| | | | | | 1500 | (3.00) | (2.03) | (2.75) | (134) |
| HORIZON; August 13, 1952; 1234 GCT; 0°06'N, 95°06.5'W; sounding, 1780 fm; wind, 170°, force 3; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | 190 |
| 0 | 23.52 | 4.84 | 0.46a) | 0 | 0 | 23.52 | 4.84 | 0.46 | 0 |
| 9 | 23.54 | 4.84 | 0.54 | 0.4 | 10 | 23.54 | 4.84 | 0.54 | 0.6 |
| 23 | 19.84 | 4.72 | 0.84 | 3.8 | 20 | 20.75 | 4.78 | 0.69 | 2.7 |
| 51 | 16.24 | 3.29 | 1.34 | 13.0 | 30 | 19.06 | 4.67 | 0.72 | 6.0 |
| 75 | 14.54 | 2.22 | 1.62 | 17.1 | 50 | 16.44 | 3.60 | 1.34 | 12.9 |
| 103 | 13.36 | 2.55 | 1.60 | 18.4 | 75 | 14.54 | 2.22 | 1.60 | 17.1 |
| 155 | 13.14 | 2.41 | 1.66 | 14.9 | 100 | 13.40 | 2.52 | 1.60 | 18.4 |
| 207 | 13.04 | 2.27 | 1.72 | 16.0 | 150 | 13.15 | 2.43 | 1.65 | 15.4 |
| 312 | 11.35 | 0.27 | 2.40 | 30.4 | 200 | 13.06 | 2.29 | 1.72 | 15.7 |
| 421 | 8.68 | 0.50 | 2.67 | 42.8 | 250 | 12.63 | 1.17 | 1.90 | 21 |
| 526 | 7.53 | 1.04 | 2.65 | 46.4 | 300 | 11.70 | 0.32 | 2.30 | 29 |
| 629 | 6.86 | 1.38 | 2.62 | 52.7 | 400 | 9.10 | 0.40 | 2.65 | 41 |
| 834 | 5.30 | 1.64 | 2.69 | 75.1 | 500 | 7.73 | 0.93 | 2.65 | 46 |
| 1037 | 4.30 | 1.61 | 2.70 | 95.4 | 600 | 7.04 | 1.29 | 2.62 | 51 |
| 1235 | 3.72 | 1.87 | 2.66 | 108.2 | 700 | 6.28 | 1.55 | 2.64 | 60 |
| 1579 | 2.89 | 2.13 | 2.67 | 128.9 | 800 | 5.53 | 1.64 | 2.68 | 72 |
| | | | | | 1000 | 4.45 | 1.61 | 2.71 | 92 |
| | | | | | 1200 | 3.82 | 1.83 | 2.67 | 107 |
| | | | | | 1500 | 3.06 | 2.10 | 2.67 | 123 |

a) Alternate value, 0.39 µg at/L, not used in interpolation.

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HORIZON; August 13, 1952; 2249 GCT; 0°01'N, 96°05.5'W; sounding, 1770 fm; wind, 160°, force 4; weather, cloudy; sea, rough; wire angle, 09°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 24.17 | 4.84 | | | 0 | 24.17 | 4.84 | | |
| 10 | 24.11 | 4.88 | | | 10 | 24.11 | 4.88 | | |
| 25 | 17.93 | 4.15 | | | 20 | 20.60 | 4.64 | | |
| 53 | 15.46 | 2.98 | | | 30 | 17.32 | 3.78 | | |
| 77 | 14.44 | 2.82 | | | 50 | 15.70 | 3.03 | | |
| 105 | 13.94 | 2.68 | | | 75 | 14.46 | 2.84 | | |
| 158 | 13.13 | 2.51 | | | 100 | 14.03 | 2.70 | | |
| 208 | 12.93 | 2.22 | | | 150 | 13.21 | 2.54 | | |
| 310 | 10.72 | 0.35 | | | 200 | 13.01 | 2.30 | | |
| 417 | 8.62 | 0.57 | | | 250 | 12.17 | 1.05 | | |
| 520 | 7.68 | 0.86 | | | 300 | 10.96 | 0.39 | | |
| 622 | 7.00 | 0.93 | | | 400 | 8.90 | 0.51 | | |
| 823 | 5.56 | 1.65 | | | 500 | 7.81 | 0.83 | | |
| 1027 | 4.12 | 1.77 | | | 600 | 7.14 | 0.89 | | |
| 1220 | 3.70 | 1.87 | | | 700 | 6.49 | 1.27 | | |
| 1562 | 2.94 | 2.12 | | | 800 | 5.75 | 1.61 | | |
| | | | | | 1000 | 4.25 | 1.76 | | |
| | | | | | 1200 | 3.74 | 1.85 | | |
| | | | | | 1500 | 3.04 | 2.08 | | |

192

HORIZON; August 14, 1952; 0635 GCT; 0°01'N, 97°07'W; sounding, 1740 fm; wind, 160°, force 4; weather, overcast; sea, moderate; wire angle, 07°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 24.10 | 4.72 | 0.48 | 0.9 | 0 | 24.10 | 4.72 | 0.48 | 0.9 |
| 10 | 24.18 | 4.81 | 0.54 | 1.3 | 10 | 24.18 | 4.81 | 0.54 | 1.3 |
| 25 | 18.86 | 4.24 | 1.08 | 6.7 | 20 | 22.25 | 4.70 | 0.69 | 5.2 |
| 54 | 15.45 | 2.71 | 1.58 | 14.9 | 30 | 17.30 | 3.65 | 1.24 | 9.0 |
| 78 | 14.96 | 2.83 | 1.63 | 15.8 | 50 | 15.59 | 2.73 | 1.54 | 14.0 |
| 106 | 14.33 | 2.78 | 1.72 | 16.0 | 75 | 15.02 | 2.83 | 1.63 | 15.7 |
| 159 | 13.16 | 2.54 | 1.74 | 18.0 | 100 | 14.47 | 2.80 | 1.70 | 16.0 |
| 210 | 12.92 | 2.20 | 1.87 | 18.2 | 150 | 13.24 | 2.58 | 1.74 | 17.4 |
| 314 | 11.22 | 0.38 | 2.56a) | 31.9 | 200 | 12.99 | 2.30 | 1.84 | 18 |
| 422 | 8.94 | 0.42 | 2.78 | 41.0 | 250 | 12.38 | 1.36 | 2.08 | 22 |
| 525 | 7.84 | 0.79 | 2.80 | 46.6 | 300 | 11.56 | 0.46 | 2.42 | 30 |
| 628 | 6.90 | 1.11 | 2.86 | 57.6 | 400 | 9.28 | 0.40 | 2.75 | 40 |
| 829 | 5.44 | 1.76 | 2.89 | 69.7 | 500 | 8.11 | 0.71 | 2.79 | 45 |
| 1031 | 4.47 | 1.76 | 2.92 | 90.7 | 600 | 7.14 | 1.01 | 2.85 | 54 |
| 1223 | 3.73 | 1.89 | 2.87 | 107.3 | 700 | 6.30 | 1.41 | 2.87 | 62 |
| 1568 | 2.89 | 2.17 | 2.90 | 128.9 | 800 | 5.62 | 1.71 | 2.88 | 68 |
| | | | | | 1000 | 4.60 | 1.74 | 2.92 | 87 |
| | | | | | 1200 | 3.82 | 1.87 | 2.88 | 106 |
| | | | | | 1500 | 3.02 | 2.14 | 2.90 | 121 |

a) Mean value of 2.52 and 2.59 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; August 14, 1952; 1359 GCT; 0°01'N, 98°16'W; sounding, 1436 fm; wind, 160°, force 4; weather, cloudy; sea, very rough; wire angle, 05°. 193

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.99 | 4.75 | | | 0 | 23.99 | 4.75 | | |
| 10 | 23.94 | 4.76 | | | 10 | 23.94 | 4.76 | | |
| 25 | 19.15 | 4.02 | | | 20 | 21.40 | 4.40 | | |
| 54 | 16.31 | 3.06 | | | 30 | 18.30 | 3.70 | | |
| 78 | 14.76 | 2.92 | | | 50 | 16.65 | 3.14 | | |
| 107 | 13.90 | 2.67 | | | 75 | 14.85 | 2.94 | | |
| 160 | 13.10 | 2.47 | | | 100 | 14.06 | 2.73 | | |
| 212 | 12.86 | 2.15 | | | 150 | 13.17 | 2.50 | | |
| 316 | 11.02 | 0.46 | | | 200 | 12.93 | 2.27 | | |
| 425 | 8.78 | 0.47 | | | 250 | 12.45 | 1.48 | | |
| 530 | 7.85 | 0.87 | | | 300 | 11.46 | 0.53 | | |
| 634 | 7.06 | 1.05 | | | 400 | 9.13 | 0.47 | | |
| 840 | 5.32 | 1.86 | | | 500 | 8.08 | 0.77 | | |
| 1044 | 4.29 | 1.77 | | | 600 | 7.33 | 0.97 | | |
| 1241 | 3.71 | 1.93 | | | 700 | 6.47 | 1.37 | | |
| 1584 | 2.96 | 2.10 | | | 800 | 5.62 | 1.77 | | |
| | | | | | 1000 | 4.47 | 1.77 | | |
| | | | | | 1200 | 3.83 | 1.92 | | |
| | | | | | 1500 | 3.14 | 2.08 | | |

HORIZON; August 14, 1952; 2246 GCT; 0°01.5'S, 99°08.5'W; sounding, 1580 fm; wind, 140°, force 5; weather, cloudy; sea, rough; wire angle, 07°. 194

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.37 | 4.76 | 0.65a) | 0.9 | 0 | 23.37 | 4.76 | 0.65 | 0.9 |
| 10 | 23.08 | 4.73 | 0.70 | 1.4 | 10 | 23.08 | 4.73 | 0.70 | 1.4 |
| 25 | 19.70 | 4.31 | 1.08 | 6.8 | 20 | 20.90 | 4.54 | 0.84 | 5.0 |
| 55 | 16.50 | 3.14 | 1.36 | 13.7 | 30 | 18.80 | 4.05 | 1.16 | 8.8 |
| 79 | 15.49 | 2.90 | 1.42 | 6.7 | 50 | 16.73 | 3.26 | 1.34 | 13.2 |
| 108 | 14.08 | 2.79 | 1.56 | 11.7 | 75 | 15.63 | 2.91 | 1.41 | 7.3 |
| 161 | 13.06 | 2.52 | 1.71 | 10.8 | 100 | 14.40 | 2.81 | 1.52 | 10.4 |
| 213 | 12.68 | 2.00 | 1.90b) | 19.4 | 150 | 13.19 | 2.61 | 1.68 | 11.1 |
| 317 | 11.48 | 0.69 | 2.33 | 29.3 | 200 | 12.80 | 2.14 | 1.85 | 17 |
| 425 | 9.34 | 0.45 | 2.66 | 38.0 | 250 | 12.31 | 1.43 | 2.05 | 24 |
| 530 | 7.84 | 0.90 | 2.78 | 45.0 | 300 | 11.72 | 0.81 | 2.26 | 28 |
| 634 | 7.18 | 1.03 | 2.82 | 52.0 | 400 | 9.86 | 0.45 | 2.60 | 36 |
| 838 | 5.49 | 1.98 | 2.82 | 67.1 | 500 | 8.16 | 0.77 | 2.76 | 43 |
| 1044 | 4.32 | 1.72 | 2.87 | 92.5 | 600 | 7.45 | 1.00 | 2.81 | 50 |
| 1242 | 3.68 | 1.99 | 2.88 | 106.4 | 700 | 6.68 | 1.14 | 2.82 | 62 |
| 1583 | 2.80 | 2.20 | 2.87 | 130.7 | 800 | 5.81 | 1.32 | 2.83 | 74 |
| | | | | | 1000 | 4.57 | 1.67 | 2.87 | 89 |
| | | | | | 1200 | 3.80 | 1.94 | 2.88 | 103 |
| | | | | | 1500 | 3.00 | 2.17 | 2.88 | 125 |

a) Alternate value, 0.79 µg at/L, not used in interpolation.
b) Mean value of 1.87 and 1.94 µg at/L.

195 HORIZON; August 15, 1952; 0548 GCT; 0°00', 100°00'W; sounding, 1790 fm; wind, 160°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 23.46 | 4.76 | | | 0 | 23.46 | 4.76 | | |
| 10 | 23.11 | 4.71 | | | 10 | 23.11 | 4.71 | | |
| 25 | 20.16 | 4.25 | | | 20 | 22.35 | 4.50 | | |
| 53 | 16.38 | 3.01 | | | 30 | 19.30 | 3.85 | | |
| 77 | 14.64 | 2.93 | | | 50 | 16.67 | 3.09 | | |
| 105 | 14.05 | 2.78 | | | 75 | 14.70 | 2.93 | | |
| 157 | 13.05 | 2.47 | | | 100 | 14.14 | 2.81 | | |
| 209 | 12.89 | 2.22 | | | 150 | 13.13 | 2.50 | | |
| 310 | 12.17 | 1.12 | | | 200 | 12.91 | 2.29 | | |
| 416 | 9.26 | 0.47 | | | 250 | 12.68 | 1.80 | | |
| 518 | 7.88 | 0.93 | | | 300 | 12.29 | 1.21 | | |
| 620 | 7.22 | 1.02 | | | 400 | 9.62 | 0.48 | | |
| 820 | 5.58 | 1.56 | | | 500 | 8.01 | 0.87 | | |
| 1020 | 4.56 | 1.60 | | | 600 | 7.36 | 0.98 | | |
| 1215 | 3.78 | 1.95 | | | 700 | 6.51 | 1.30 | | |
| 1557 | 2.96 | 2.11 | | | 800 | 5.71 | 1.54 | | |
| | | | | | 1000 | 4.67 | 1.57 | | |
| | | | | | 1200 | 3.83 | 1.93 | | |
| | | | | | 1500 | 3.06 | 2.12 | | |

196 HORIZON; August 15, 1952; 1333 GCT; 1°00'N, 100°30'W; sounding, 1810 fm; wind, 140°, force 4; weather, overcast; sea, very rough; wire angle, 05°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 24.35 | 4.67 | 0.54 | 0.4 | 0 | 24.35 | 4.67 | 0.54 | 0.4 |
| 10 | 24.42 | 4.69 | 0.53 | 0.4 | 10 | 24.42 | 4.69 | 0.53 | 0.4 |
| 25 | 22.80 | 4.32 | 0.74 | 1.6 | 20 | 23.90 | 4.36 | 0.60 | 1.0 |
| 55 | 19.74 | 4.32 | 0.98 | 7.7 | 30 | 22.30 | 4.32 | 0.80 | 2.2 |
| 80 | 15.50 | 2.62 | 1.48 | 15.5 | 50 | 20.37 | 4.32 | 0.95 | 6.4 |
| 108 | 13.88 | 2.07 | 1.66 | 18.4 | 75 | 15.93 | 3.04 | 1.30 | 14.5 |
| 162 | 12.86 | 2.32 | 1.70 | 18.2 | 100 | 14.17 | 2.09 | 1.64 | 17.8 |
| 215 | 12.78 | 1.93 | 1.78 | 20.2 | 150 | 12.94 | 2.34 | 1.69 | 18.0 |
| 320 | 12.15 | 1.21 | 2.07 | 26.1 | 200 | 12.80 | 2.04 | 1.76 | 19.5 |
| 430 | 9.12 | 0.44 | 2.55 | 35.5 | 250 | 12.62 | 1.70 | 1.87 | 22 |
| 535 | 8.09 | 0.69 | 2.68 | 46.8 | 300 | 12.33 | 1.37 | 2.01 | 25 |
| 641 | 7.08 | 1.07 | 2.70 | 52.9 | 400 | 9.67 | 0.54 | 2.42 | 32 |
| 846 | 5.28 | 1.44 | 2.82 | 76.3 | 500 | 8.42 | 0.55 | 2.58 | 44 |
| 1054 | 4.43 | 1.59 | 2.84 | 92.0 | 600 | 7.48 | 0.93 | 2.64 | 51 |
| 1253 | 3.68 | 1.89 | 2.78 | 110.5 | 700 | 6.46 | 1.26 | 2.75 | 60 |
| | | | | | 800 | 5.56 | 1.42 | 2.80 | 71 |
| | | | | | 1000 | 4.64 | 1.54 | 2.84 | 88 |
| | | | | | 1200 | 3.87 | 1.83 | 2.81 | 105 |

197 HORIZON; August 16, 1952; 0004 GCT; 2°01'N, 101°03'W; sounding, 1830 fm; wind, 150°, force 4; weather, drizzle; sea, very rough; wire angle, 02°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 25.30 | 4.77 | | | 0 | 25.30 | 4.77 | | |
| 10 | 25.32 | 4.77 | | | 10 | 25.32 | 4.77 | | |
| 25 | 24.69 | 4.57 | | | 20 | 25.26 | 4.66 | | |
| 55 | 20.04 | 4.50 | | | 30 | 23.40 | 4.54 | | |
| 80 | 18.93 | 4.17 | | | 50 | 20.46 | 4.50 | | |
| 109 | 14.38 | 1.89 | | | 75 | 19.23 | 4.35 | | |
| 162 | 12.81 | 2.28 | | | 100 | 15.10 | 1.94 | | |
| 215 | 12.60 | 1.99 | | | 150 | 13.00 | 2.22 | | |
| 321 | 12.14 | 1.24 | | | 200 | 12.64 | 2.08 | | |
| 432 | 9.02 | 0.49 | | | 250 | 12.50 | 1.77 | | |
| 537 | 8.04 | 0.77 | | | 300 | 12.31 | 1.43 | | |
| 642 | 6.88 | 1.09 | | | 400 | 9.65 | 0.60 | | |
| 848 | 5.34 | 1.72 | | | 500 | 8.39 | 0.65 | | |
| 1055 | 4.48 | 1.48 | | | 600 | 7.34 | 0.93 | | |
| 1253 | 3.60 | 1.67 | | | 700 | 6.36 | 1.33 | | |
| 1599 | 2.80 | 2.09 | | | 800 | 5.64 | 1.65 | | |
| | | | | | 1000 | 4.73 | 1.54 | | |
| | | | | | 1200 | 3.83 | 1.58 | | |

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

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HORIZON; August 16, 1952; 0758 GCT; 2°50.5'N, 101°28'W; sounding, 1750 fm; wind, 160°, force 5; weather, cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.17 | 4.73 | 0.42a) | 0 | 0 | 25.17 | 4.73 | 0.42 | 0 |
| 10 | 25.17 | 4.80 | 0.42 | 2.2 | 10 | 25.17 | 4.80 | 0.42 | 2.2 |
| 25 | 25.14 | 4.80 | 0.44 | 0.4 | 20 | 25.15 | 4.80 | 0.43 | 1.0 |
| 54 | 24.82 | 4.81 | 0.49 | 1.3 | 30 | 25.14 | 4.80 | 0.45 | 0.5 |
| 78 | 20.07 | 3.85 | 1.18b) | 4.9 | 50 | 25.02 | 4.81 | 0.47 | 1.2 |
| 106 | 16.30 | 2.69 | 1.50 | 10.4 | 75 | 20.53 | 4.25 | 0.96 | 4.7 |
| 159 | 13.40 | 2.12 | 1.72 | 10.4 | 100 | 16.95 | 2.81 | 1.47 | 9.3 |
| 211 | 12.58 | 1.87 | 1.88 | 16.6 | 150 | 13.63 | 2.18 | 1.69 | 10.4 |
| 314 | 12.01 | 0.85 | 2.20 | 20.2 | 200 | 12.68 | 1.93 | 1.86 | 15.4 |
| 421 | 9.86 | 0.50 | 2.44 | 26.1 | 250 | 12.40 | 1.44 | 2.00 | 18 |
| 524 | 7.74 | 0.80 | 2.68c) | 36.7 | 300 | 12.13 | 0.95 | 2.16 | 20 |
| 627 | 6.62 | 1.05 | 2.78 | 46.4 | 400 | 10.55 | 0.52 | 2.39 | 25 |
| 828 | 5.10 | 1.64 | 2.74 | 56.3 | 500 | 8.15 | 0.73 | 2.59 | 34 |
| 1029 | 4.38 | 1.58 | 2.80d) | 75.4 | 600 | 6.90 | 0.98 | 2.75 | 44 |
| 1221 | 3.84 | 1.74 | 2.75 | 93.1 | 700 | 5.94 | 1.32 | 2.77 | 51 |
| 1560 | 2.92 | 1.95 | 2.79 | 126.4 | 800 | 5.25 | 1.58 | 2.74 | 55 |
| | | | | | 1000 | 4.48 | 1.58 | 2.79 | 72 |
| | | | | | 1200 | 3.92 | 1.73 | 2.76 | 92 |
| | | | | | 1500 | 3.50 | 1.93 | 2.79 | 120 |

199

HORIZON; August 16, 1952; 1638 GCT; 3°54.5'N, 101°56'W; sounding, 1800 fm; wind, 170°, force 4; weather, cloudy; sea, very rough; wire angle, 24°.

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 26.50 | 4.63 | 0 | 26.50 | 4.63 |
| 9 | 26.52 | 4.59 | 10 | 26.52 | 4.60 |
| 23 | 26.52 | 4.63 | 20 | 26.52 | 4.63 |
| 51 | 26.14 | 4.56 | 30 | 26.52 | 4.63 |
| 73 | 21.58 | 2.52 | 50 | 26.37 | 4.57 |
| 100 | 14.90 | 1.83 | 75 | 21.12 | 2.40 |
| 149 | 13.28 | 1.93 | 100 | 14.90 | 1.83 |
| 197 | 12.59 | 1.20 | 150 | 13.24 | 1.93 |
| 294 | 11.12 | 1.15 | 200 | 12.53 | 1.19 |
| 397 | 9.44 | 0.68 | 250 | 11.80 | 1.18 |
| 495 | 8.26 | 0.24 | 300 | 11.99 | 1.14 |
| 593 | 6.80 | 0.54 | 400 | 9.38 | 0.64 |
| 786 | 5.42 | 1.20 | 500 | 8.17 | 0.24 |
| 984 | 4.47 | 1.43 | 600 | 6.76 | 0.57 |
| 1174 | 3.92 | 1.53 | 700 | 5.99 | 0.94 |
| 1514 | 3.07 | 1.85 | 800 | 5.33 | 1.23 |
| | | | 1000 | 4.42 | 1.43 |
| | | | 1200 | 3.86 | 1.56 |
| | | | 1500 | 3.10 | 1.84 |

a) Mean value of 0.38 and 0.45 µg at/L.
b) Mean value of 1.14 and 1.21 µg at/L.
c) Mean value of 2.63 and 2.74 µg at/L.
d) Alternate value, 2.89 µg at/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 200 | HORIZON; August 17, 1952; 0557 GCT; 5°03.5'N, 102°32.5'W; sounding, 1730 fm; wind, 170°, force 5; weather, partly cloudy; sea, moderate; wire angle, 19°. | | | | | | | | |
| 0 | 26.51 | 4.66 | 0.42 | 1.3 | 0 | 26.51 | 4.66 | 0.42 | 1.3 |
| 9 | 26.52 | 4.66 | 0.40 | 0.4 | 10 | 26.52 | 4.66 | 0.40 | 0.3 |
| 22 | 26.51 | 4.67 | 0.42 | 0.2 | 20 | 26.51 | 4.67 | 0.42 | 0.2 |
| 48 | 25.94 | 4.67 | 0.46 | 0.4 | 30 | 26.50 | 4.67 | 0.44 | 0.2 |
| 70 | 24.92 | 4.47 | 0.60 | 0.7 | 50 | 25.81 | 4.67 | 0.46 | 0.5 |
| 95 | 16.12 | 0.96 | 2.08 | 16.9 | 75 | 23.05 | 3.00 | 1.06 | 2.2 |
| 144 | 11.79 | 1.30 | 2.14 | 26.1 | 100 | 14.95 | 0.97 | 2.10 | 18.3 |
| 190 | 11.16 | 0.95 | 2.37a) | 29.0 | 150 | 11.70 | 1.28 | 2.16 | 27 |
| 290 | 9.87 | 1.10 | 2.40 | 32.2 | 200 | 11.03 | 0.96 | 2.34 | 30 |
| 394 | 9.16 | 0.68 | 2.54 | 38.0 | 250 | 10.28 | 1.04 | 2.38 | 31 |
| 498 | 7.98 | 0.13 | 2.96 | 52.7 | 300 | 9.80 | 1.07 | 2.41 | 35 |
| 602 | 6.65 | 0.20 | 3.02 | 67.9 | 400 | 9.11 | 0.64 | 2.56 | 39 |
| 804 | 5.40 | 0.77 | 2.99 | 79.4 | 500 | 7.94 | 0.13 | 2.96 | 53 |
| 1010 | 4.36 | 1.11 | 2.98 | 100.1 | 600 | 6.69 | 0.20 | 3.02 | 67 |
| 1208 | 3.78 | 1.46 | 2.96b) | 113.4 | 700 | 5.99 | 0.46 | 3.01 | 74 |
| 1554 | 2.84 | 1.92 | 2.84 | 136.1 | 800 | 5.44 | 0.76 | 2.99 | 79 |
| | | | | | 1000 | 4.41 | 1.10 | 2.98 | 99 |
| | | | | | 1200 | 3.80 | 1.45 | 2.96 | 113 |
| | | | | | 1500 | 2.99 | 1.86 | 2.87 | 132 |
| 201 | HORIZON; August 17, 1952; 1436 GCT; 6°00'N, 103°00'W; sounding, 1670 fm; wind, 170°, force 5; weather, cloudy; sea, very rough; wire angle, 16°. | | | | | | | | |
| 0 | 27.04 | 4.57 | | | 0 | 27.04 | 4.57 | | |
| 9 | 27.05 | 4.61 | | | 10 | 27.05 | 4.61 | | |
| 22 | 27.04 | 4.62 | | | 20 | 27.04 | 4.62 | | |
| 49 | 27.06 | 4.59 | | | 30 | 27.04 | 4.61 | | |
| 72 | 22.10 | 2.75 | | | 50 | 27.05 | 4.58 | | |
| 100 | 13.10 | 0.74 | | | 75 | 21.40 | 2.30 | | |
| 146 | 12.53 | 0.80 | | | 100 | 13.10 | 0.74 | | |
| 201 | 11.88 | 0.76 | | | 150 | 12.48 | 0.79 | | |
| 302 | 10.10 | 1.10 | | | 200 | 11.89 | 0.76 | | |
| 410 | 9.14 | 0.68 | | | 250 | 10.93 | 0.93 | | |
| 515 | 8.04 | 0.17 | | | 300 | 10.14 | 1.10 | | |
| 620 | 6.92 | 0.21 | | | 400 | 9.25 | 0.72 | | |
| 826 | 5.22 | 0.55 | | | 500 | 8.22 | 0.22 | | |
| 1033 | 4.33 | 1.08 | | | 600 | 7.13 | 0.20 | | |
| 1231 | 3.54 | 1.36 | | | 700 | 6.16 | 0.30 | | |
| 1573 | 2.78 | 1.89 | | | 800 | 5.39 | 0.48 | | |
| | | | | | 1000 | 4.50 | 1.02 | | |
| | | | | | 1200 | 3.66 | 1.31 | | |
| | | | | | 1500 | 2.90 | 1.80 | | |

a) Mean value of 2.33 and 2.41 µg at/L.
b) Mean value of 2.92 and 2.99 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; August 18, 1952; 0116 GCT; 7°02'N, 103°29'W; sounding, 1740 fm; wind, 170°, force 4; weather, cloudy; sea, very rough; wire angle, 10°. 202

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.20 | 4.63 | 0.32 | 5.0 | 0 | 27.20 | 4.63 | 0.32 | 5.8 |
| 10 | 27.20 | 4.65 | 0.28a) | 0 | 10 | 27.20 | 4.65 | 0.28 | 0 |
| 25 | 27.19 | 4.63 | 0.35 | 0 | 20 | 27.19 | 4.65 | 0.32 | 0 |
| 54 | 22.10 | 2.19 | 1.48 | 6.1 | 30 | 27.18 | 4.58 | 0.44 | 0.4 |
| 77 | 16.18 | 0.76 | 2.09 | 17.3 | 50 | 24.60 | 2.75 | 0.96 | 5.2 |
| 105 | 12.74 | 0.63 | 2.26 | 24.5 | 75 | 16.75 | 0.84 | 2.04 | 16.8 |
| 156 | 11.52 | 0.55 | 2.32 | 32.0 | 100 | 13.00 | 0.65 | 2.24 | 23 |
| 208 | 10.85 | 0.65 | 2.40 | 34.2 | 150 | 11.64 | 0.55 | 2.31 | 31 |
| 310 | 9.94 | 0.70 | 2.42 | 39.4 | 200 | 10.94 | 0.63 | 2.39 | 34 |
| 418 | 8.90 | 0.32 | 2.67 | 45.4 | 250 | 10.47 | 0.69 | 2.41 | 36 |
| 523 | 7.66 | 0.17 | 2.94 | 57.1 | 300 | 10.03 | 0.70 | 2.42 | 39 |
| 626 | 6.74 | 0.20 | 2.98 | 65.9 | 400 | 9.10 | 0.41 | 2.62 | 44 |
| 830 | 5.22 | 0.52 | 3.04b) | 87.5 | 500 | 7.93 | 0.18 | 2.89 | 55 |
| 1033 | 4.30 | 0.88 | 3.02c) | 104.4 | 600 | 6.97 | 0.18 | 2.97 | 64 |
| 1228 | 3.58 | 1.33 | 2.88 | 120.8 | 700 | 6.14 | 0.29 | 3.01 | 74 |
| 1571 | 2.75 | 1.89 | 2.80 | 135.2 | 800 | 5.42 | 0.47 | 3.04 | 84 |
| | | | | | 1000 | 4.46 | 0.80 | 3.03 | 102 |
| | | | | | 1200 | 3.67 | 1.26 | 2.91 | 119 |
| | | | | | 1500 | 2.89 | 1.84 | 2.80 | 133 |

HORIZON; August 18, 1952; 1014 GCT; 8°05'N, 103°54'W; sounding, 1630 fm; wind, 180°, force 4; weather, rain; sea, very rough; wire angle, 00°. 203

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 27.18 | 4.54 | 0 | 27.18 | 4.54 | |
| 10 | 27.20 | 4.62 | 10 | 27.20 | 4.62 | |
| 25 | 27.18 | 4.64 | 20 | 27.19 | 4.64 | |
| 54 | 20.32 | 1.65 | 30 | 27.14 | 4.62 | |
| 78 | 15.32 | 0.63 | 50 | 22.55 | 2.10 | |
| 107 | 12.86 | 0.46u | 75 | 15.56 | 0.70 | |
| 160 | 11.50 | 0.89u | 100 | 13.23 | 0.46 | |
| 212 | 10.82 | 0.80 | 150 | 11.69 | (0.84) | |
| 318 | 9.83 | 0.80 | 200 | 10.97 | 0.82 | |
| 427 | 8.58 | 0.14 | 250 | 10.45 | 0.80 | |
| 534 | 7.40 | 0.11 | 300 | 10.00 | 0.80 | |
| 640 | 6.37 | 0.30 | 400 | 18.90 | 0.29 | |
| 847 | 5.06 | 0.56 | 500 | 7.76 | 0.12 | |
| 1056 | 4.22 | 0.92 | 600 | 6.75 | 0.23 | |
| 1257 | 3.63 | 1.21 | 700 | 5.93 | 0.36 | |
| 1601 | 2.76 | 1.84 | 800 | 5.31 | 0.48 | |
| | | | 1000 | 4.42 | 0.85 | |
| | | | 1200 | 3.80 | 1.12 | |
| | | | 1500 | 3.00 | 1.68 | |

a) Alternate value, 0.49 µg at/L, not used in interpolation.
b) Mean value of 3.00 and 3.07 µg at/L.
c) Mean value of 2.98 and 3.05 µg at/L.

204 HORIZON; August 18, 1952; 2035 GCT; 9°00'N, 104°30'W; sounding, 1660 fm; wind, 200°, force 3; weather, cloudy; sea, moderate; wire angle, 18°.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 0 | 27.49 | 4.62 | 0.30 | 0 | 0 | 27.49 | 4.62 | 0.30 | 0 |
| 9 | 27.27 | 4.60 | 0.26 | 0 | 10 | 27.27 | 4.61 | 0.26 | 0 |
| 24 | 27.27 | 4.62 | 0.32 | 0 | 20 | 27.27 | 4.62 | 0.30 | 0 |
| 51 | 18.72 | 1.02 | 1.96 | 11.0 | 30 | 27.19 | 4.56 | 0.47 | 0.8 |
| 73 | 14.32 | 0.36 | 2.24 | 17.8 | 50 | 19.90 | 1.50 | 1.76 | 10.8 |
| 100 | 12.57 | 0.49 | 2.26 | 24.5 | 75 | 14.20 | 0.36 | 2.25 | 18.5 |
| 149 | 11.80 | 0.49 | 2.26 | 27.4 | 100 | 12.57 | 0.49 | 2.26 | 24.5 |
| 199 | 11.08 | 0.88 | 2.23 | 28.4 | 150 | 11.79 | 0.49 | 2.26 | 27.5 |
| 296 | 10.22 | 0.84 | 2.28 | 32.0 | 200 | 11.07 | 0.88 | 2.23 | 28.5 |
| 407 | 8.89 | 0.12 | 2.71 | 45.7 | 250 | 10.64 | 0.88 | 2.24 | 30 |
| 503 | 7.64 | 0.15 | 2.83 | 58.5 | 300 | 10.18 | 0.84 | 2.30 | 32 |
| 603 | 6.62 | 0.18 | 2.84 | 69.8 | 400 | 8.93 | 0.14 | 2.69 | 45 |
| 800 | 5.28 | 0.33 | 3.02 | 85.3 | 500 | 7.70 | 0.15 | 2.83 | 58 |
| 991 | 4.33 | 0.74 | 3.00 | 101.9 | 600 | 6.66 | 0.18 | 2.84 | 69 |
| 1174 | 3.82 | 1.04 | 2.94 | 113.8 | 700 | 5.92 | 0.23 | 2.93 | 77 |
| | | | | | 800 | 5.28 | 0.33 | 3.02 | 85 |
| | | | | | 1000 | 4.29 | 0.75 | 3.00 | 103 |
| | | | | | 1200 | (3.75) | (1.08) | (2.93) | 115 |

205 HORIZON; August 19, 1952; 1106 GCT; 10°06'N, 105°01.5'W; sounding, 1680 fm; wind, 210°, force 5; weather, cloudy; sea, rough; wire angle, 08°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.52 | 4.61 | | | 0 | 27.52 | 4.61 | | |
| 9 | 27.53 | 4.58 | | | 10 | 27.53 | 4.58 | | |
| 24 | 27.54 | 4.56 | | | 20 | 27.54 | 4.57 | | |
| 52 | 19.10 | 0.64 | | | 30 | 27.52 | 4.52 | | |
| 76 | 14.40 | 0.32 | | | 50 | 20.50 | 1.35 | | |
| 104 | 13.06 | 0.24 | | | 75 | 14.43 | 0.33 | | |
| 156 | 11.76 | 0.64 | | | 100 | 13.25 | 0.24 | | |
| 209 | 11.00 | 0.56 | | | 150 | 11.87 | 0.61 | | |
| 313 | 10.08 | 0.11 | | | 200 | 11.10 | 0.58 | | |
| 423 | 8.51 | 0.09 | | | 250 | 10.65 | 0.41 | | |
| 528 | 7.22 | 0.10 | | | 300 | 10.22 | 0.16 | | |
| 632 | 6.18 | 0.20 | | | 400 | 8.89 | 0.10 | | |
| 836 | 4.98 | 0.52 | | | 500 | 7.55 | 0.10 | | |
| 1040 | 4.18 | 0.84 | | | 600 | 6.46 | 0.16 | | |
| 1234 | 3.64 | 1.11 | | | 700 | 5.72 | 0.28 | | |
| 1575 | 2.84 | 1.81 | | | 800 | 5.15 | 0.45 | | |
| | | | | | 1000 | 4.31 | 0.77 | | |
| | | | | | 1200 | 3.74 | 1.07 | | |
| | | | | | 1500 | 3.01 | 1.67 | | |

206 HORIZON; August 21, 1952; 0337 GCT; 11°00'N, 105°29'W; sounding, 1820 fm; wind, 280°, force 3; weather, cloudy; sea, slight; wire angle, 08°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.49 | 4.61 | 0.36 | 2.0 | 0 | 27.49 | 4.61 | 0.36 | 2.0 |
| 10 | 27.45 | 4.59 | 0.34 | 0 | 10 | 27.45 | 4.59 | 0.34 | 0 |
| 24 | 27.54 | 4.66 | 0.36 | 0 | 20 | 27.53 | 4.64 | 0.35 | 0 |
| 53 | 21.92 | 4.65 | 1.20 | 4.1 | 30 | 27.51 | 4.66 | 0.40 | 0.2 |
| 76 | 16.00 | 0.19 | 2.32 | 18.9 | 50 | 23.30 | 4.65 | 0.96 | 3.3 |
| 104 | 13.70 | 0.08 | 2.40 | 23.8 | 75 | 16.09 | 0.20 | 2.31 | 18.7 |
| 157 | 12.27 | 0.23 | 2.40 | 27.0 | 100 | 13.92 | 0.09 | 2.39 | 23 |
| 208 | 11.72 | 0.38 | 2.38 | 29.0 | 150 | 12.39 | 0.22 | 2.40 | 27 |
| 313 | 10.35 | 0.16 | 2.61 | 35.5 | 200 | 11.80 | 0.37 | 2.98 | 29 |
| 423 | 8.74 | 0.10 | 2.86 | 48.6 | 250 | 11.20 | 0.32 | 2.45 | 31 |
| 528 | 7.32 | 0.09 | 2.97 | 63.4 | 300 | 9.83 | 0.20 | 2.57 | 35 |
| 631 | 6.36 | 0.12 | 3.05 | 74.3 | 400 | 9.09 | 0.10 | 2.82 | 46 |
| 836 | 4.92 | 0.36 | 3.10 | 93.1 | 500 | 7.66 | 0.09 | 2.96 | 60 |
| 1044 | 4.08 | 0.67 | 3.08 | 110.0 | 600 | 6.63 | 0.11 | 3.02 | 71 |
| 1240 | 3.47 | 1.07 | 3.07 | 137.0 | 700 | 5.80 | 0.20 | 3.08 | 81 |
| 1586 | 2.76 | 1.63 | 2.99 | - | 800 | 5.11 | 0.32 | 3.10 | 90 |
| | | | | | 1000 | 4.24 | 0.59 | 3.09 | 106 |
| | | | | | 1200 | 3.57 | 0.99 | 3.07 | 130 |
| | | | | | 1500 | 2.93 | 1.53 | 3.01 | |

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; August 21, 1952; 1159 GCT; 12°07'N, 106°02'W; sounding, 1850 fm; wind, 210°, force 3; weather, cloudy; sea, moderate; wire angle, 10°. 207

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.85 | 4.58 | | | 0 | 27.85 | 4.58 | | |
| 9 | 27.82 | 4.54 | | | 10 | 27.82 | 4.55 | | |
| 24 | 28.00 | 4.59 | | | 20 | 27.96 | 4.57 | | |
| 52 | 23.74 | 3.19 | | | 30 | 27.96 | 4.55 | | |
| 76 | 20.02 | 1.28 | | | 50 | 24.05 | 3.46 | | |
| 104 | 14.16 | 0.11 | | | 75 | 20.15 | 1.29 | | |
| 156 | 12.16 | 0.07 | | | 100 | 14.50 | 0.16 | | |
| 208 | 11.40 | 0.07 | | | 150 | 12.28 | 0.07 | | |
| 312 | 9.86 | 0.10 | | | 200 | 11.52 | 0.07 | | |
| 421 | 8.42 | 0.11 | | | 250 | 10.77 | 0.08 | | |
| 526 | 7.32 | 0.11 | | | 300 | 10.04 | 0.10 | | |
| 630 | 6.36 | 0.08 | | | 400 | 8.70 | 0.11 | | |
| 833 | 4.98 | 0.22 | | | 500 | 7.60 | 0.11 | | |
| 1037 | 4.16 | 0.44 | | | 600 | 6.63 | 0.08 | | |
| 1235 | 3.54 | 0.85 | | | 700 | 5.80 | 0.10 | | |
| 1579 | 2.77 | 1.60 | | | 800 | 5.14 | 0.19 | | |
| | | | | | 1000 | 4.30 | 0.40 | | |
| | | | | | 1200 | 3.64 | 0.77 | | |
| | | | | | 1500 | 2.95 | 1.46 | | |

HORIZON; August 21, 1952; 2305 GCT; 13°05'N, 106°35'W; sounding, 2040 fm; wind, 210°, force 3; weather, partly cloudy; sea, moderate; wire angle, 07°. 208

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.67 | 4.54 | 0.40 | 0 | 0 | 28.67 | 4.54 | 0.40 | 0 |
| 10 | 28.46 | 4.55 | 0.42 | 0 | 10 | 28.46 | 4.55 | 0.42 | 0 |
| 24 | 28.32 | 4.56 | 0.43 | 0 | 20 | 28.35 | 4.55 | 0.43 | 0 |
| 48 | 26.86 | 4.60 | 0.50 | 0 | 30 | 28.23 | 4.57 | 0.44 | 0 |
| 72 | 23.36 | 4.52 | 0.75 | 2.0 | 50 | 25.98 | 4.60 | 0.52 | 0.2 |
| 95 | 18.56 | 0.76 | 2.18 | 13.1 | 75 | 23.20 | 4.50 | 1.16 | 3.3 |
| 148 | 12.76 | 0.08 | 2.54 | 26.6 | 100 | 17.48 | 0.54 | 2.24 | 14.6 |
| 197 | 11.98 | 0.09 | 2.56 | 27.2 | 150 | 12.71 | 0.08 | 2.55 | 27 |
| 292 | 10.57 | 0.21 | 2.68 | 29.0 | 200 | 11.94 | 0.09 | 2.56 | 27 |
| 392 | 8.86 | 0.21 | 2.80 | 46.8 | 250 | 11.21 | 0.14 | 2.62 | 28 |
| 486 | 7.66 | 0.11 | 2.92 | 59.9 | 300 | 10.44 | 0.21 | 2.69 | 30 |
| 587 | 6.71 | 0.13 | 3.02 | 70.9 | 400 | 8.74 | 0.21 | 2.81 | 44 |
| 781 | 5.38 | 0.15 | 3.10 | 87.3 | 500 | 7.51 | 0.11 | 2.94 | 62 |
| 973 | 4.44 | 0.34 | 3.14 | 103.5 | 600 | 6.61 | 0.13 | 3.03 | 72 |
| 1171 | 3.74 | 0.75 | 3.05 | 117.7 | 700 | 5.88 | 0.14 | 3.08 | 81 |
| 1484 | 2.92 | 1.37 | 2.99 | 121.9 | 800 | 5.27 | 0.16 | 3.11 | 89 |
| | | | | | 1000 | 4.34 | 0.39 | 3.13 | 105 |
| | | | | | 1200 | 3.66 | 0.83 | 3.03 | 118 |
| | | | | | 1500 | (2.89) | (1.40) | (3.00) | (122) |

HORIZON; August 22, 1952; 0640 GCT; 14°04'N, 106°58'W; sounding, 1980 fm; wind, 160°, force 3; weather, partly cloudy; sea, moderate; wire angle, 27°. 209

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.50 | 4.55 | | | 0 | 28.50 | 4.55 | | |
| 9 | 28.54 | 4.54 | | | 10 | 28.54 | 4.54 | | |
| 23 | 28.45 | 4.58 | | | 20 | 28.49 | 4.57 | | |
| 44 | 28.08 | 4.68 | | | 30 | 28.39 | 4.60 | | |
| 65 | 24.76 | 4.30 | | | 50 | 27.20 | 4.67 | | |
| 86 | 19.84 | 1.24 | | | 75 | 22.60 | 2.30 | | |
| 131 | 13.71 | 0.09 | | | 100 | 16.70 | 0.60 | | |
| 170 | 12.43 | 0.09 | | | 150 | 13.00 | 0.09 | | |
| 251 | 10.90 | 0.10 | | | 200 | 11.81 | 0.09 | | |
| 338 | 9.68 | 0.08 | | | 250 | 10.93 | 0.10 | | |
| 421 | 8.52 | 0.08 | | | 300 | 10.20 | 0.09 | | |
| 508 | 7.46 | 0.10 | | | 400 | 8.81 | 0.08 | | |
| 685 | 5.86 | 0.15 | | | 500 | 7.56 | 0.10 | | |
| 857 | 4.86 | 0.25 | | | 600 | 6.57 | 0.13 | | |
| 1039 | 4.24 | 0.50 | | | 700 | 5.76 | 0.16 | | |
| 1330 | 3.33 | 0.93 | | | 800 | 5.14 | 0.20 | | |
| | | | | | 1000 | 4.38 | 0.44 | | |
| | | | | | 1200 | 3.74 | 0.74 | | |

SIO/IATTC

SHELLBACK

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 210 | HORIZON; August 22, 1952; 1443 GCT; 15°00'N, 107°30'W; sounding, 2080 fm; wind, 190°, force 3; weather, cloudy; sea, moderate; wire angle, 25°. | | | | | | | | |
| 0 | 28.12 | 4.55 | 0.34 | 0 | 0 | 28.12 | 4.55 | 0.34 | 0 |
| 8 | 28.10 | 4.55 | 0.38 | 0 | 10 | 28.11 | 4.55 | 0.38 | 0 |
| 22 | 28.16 | 4.57 | 0.39 | 0 | 20 | 28.16 | 4.56 | 0.39 | 0 |
| 48 | 25.94 | 4.90a) | 0.38 | 0 | 30 | 28.10 | 4.63 | 0.39 | 0 |
| 68 | 22.80 | 4.68 | 0.66 | 0.5 | 50 | 25.40 | 4.89 | 0.39 | 0 |
| 93 | 17.22 | 2.29 | 1.67 | 11.3 | 75 | 20.14 | 4.10 | 0.98 | 2.3 |
| 140 | 13.16 | 0.11 | 2.60 | 27.2 | 100 | 16.40 | 1.64 | 1.88 | 14 |
| 185 | 12.20 | 0.11 | 2.61 | 29.2 | 150 | 12.90 | 0.11 | 2.61 | 28 |
| 278 | 10.80 | 0.15 | 2.68 | 35.5 | 200 | 11.97 | 0.11 | 2.61 | 30 |
| 375 | 9.26 | 0.11 | 2.86 | 45.7 | 250 | 11.22 | 0.14 | 2.65 | 34 |
| 468 | 8.02 | 0.11 | 2.93 | 56.0 | 300 | 10.43 | 0.14 | 2.71 | 38 |
| | | | | | 400 | 8.90 | 0.11 | 2.89 | 48 |
| 211 | HORIZON; August 22, 1952; 2316 GCT; 16°00'N, 107°57'W; sounding, 2110 fm; wind, 150°, force 4; weather, cloudy; sea, rough; wire angle, 10°. | | | | | | | | |
| 0 | 28.33 | 4.58 | | | 0 | 28.33 | 4.58 | | |
| 10 | 28.30 | 4.55 | | | 10 | 28.30 | 4.55 | | |
| 24 | 28.16 | 4.60 | | | 20 | 28.20 | 4.58 | | |
| 52 | 23.78 | 5.06 | | | 30 | 28.08 | 4.72 | | |
| 76 | 19.31 | 3.78 | | | 50 | 24.45 | 5.05 | | |
| 104 | 15.00 | 0.44 | | | 75 | 19.35 | 3.80 | | |
| 155 | 12.39 | 0.12 | | | 100 | 15.40 | 0.60 | | |
| 206 | 11.67 | 0.10 | | | 150 | 12.50 | 0.13 | | |
| 308 | 10.21 | 0.11 | | | 200 | 11.75 | 0.10 | | |
| 416 | 8.74 | 0.10 | | | 250 | 11.03 | 0.10 | | |
| 521 | 7.46 | 0.11 | | | 300 | 10.31 | 0.11 | | |
| 625 | 6.14 | 0.12 | | | 400 | 8.96 | 0.11 | | |
| 832 | 5.19 | 0.15 | | | 500 | 7.71 | 0.11 | | |
| 1038 | 4.32 | 0.37 | | | 600 | 6.67 | 0.12 | | |
| 1233 | 3.68 | 0.80 | | | 700 | 5.94 | 0.12 | | |
| 1578 | 2.92 | 1.37 | | | 800 | 5.36 | 0.14 | | |
| | | | | | 1000 | 4.47 | 0.30 | | |
| | | | | | 1200 | 3.78 | 0.71 | | |
| | | | | | 1500 | 3.07 | 1.30 | | |
| 212 | HORIZON; August 23, 1952; 0731 GCT; 17°00'N, 108°30'W; sounding, 1830 fm; wind, 150°, force 4; weather, cloudy; sea, rough; wire angle, 21°. | | | | | | | | |
| 0 | 28.60 | 4.50 | 0.31 | 0 | 0 | 28.60 | 4.50 | 0.31 | 0 |
| 9 | 28.62 | 4.48 | 0.32 | 0.2 | 10 | 28.62 | 4.48 | 0.32 | 0.2 |
| 23 | 27.09 | 4.88 | 0.35 | 0.2 | 20 | 28.00 | 4.67 | 0.35 | 0.2 |
| 50 | 21.30 | 5.10 | 0.53 | 0.5 | 30 | 25.90 | 4.97 | 0.39 | 0.3 |
| 73 | 16.39 | 2.71 | 1.37 | 9.4 | 50 | 21.30 | 5.10 | 0.53 | 0.5 |
| 100 | 14.34 | 0.58 | 2.20 | 21.6 | 75 | 16.10 | 2.47 | 0.94 | 10.4 |
| 149 | 12.68 | 0.15 | 2.43 | 28.6 | 100 | 14.34 | 0.58 | 2.20 | 21.6 |
| 198 | 11.66 | 0.12 | 2.53 | 32.8 | 150 | 12.64 | 0.15 | 2.44 | 29 |
| 295 | 10.40 | 0.11 | 2.60 | 39.1 | 200 | 11.63 | 0.12 | 2.53 | 33 |
| 399 | 9.00 | 0.16 | 2.72 | 49.9 | 250 | 10.99 | 0.12 | 2.57 | 36 |
| 498 | 7.82 | 0.14 | 2.85 | 61.4 | 300 | 10.33 | 0.11 | 2.61 | 40 |
| 597 | 6.92 | 0.12 | 2.90 | 70.9 | 400 | 8.99 | 0.16 | 2.72 | 50 |
| 793 | 5.52 | 0.16 | 2.98 | 88.0 | 500 | 7.80 | 0.14 | 2.85 | 61 |
| 990 | 4.50 | 0.34 | 3.08 | 105.3 | 600 | 6.90 | 0.12 | 2.90 | 71 |
| 1179 | 3.86 | 0.66 | 3.03 | 118.4 | 700 | 6.14 | 0.13 | 2.95 | 80 |
| 1520 | 2.94 | 1.30 | 3.00 | 137.5 | 800 | 5.48 | 0.16 | 2.99 | 89 |
| | | | | | 1000 | 4.47 | 0.37 | 3.08 | 106 |
| | | | | | 1200 | 3.79 | 0.70 | 3.03 | 120 |
| | | | | | 1500 | 3.00 | 1.28 | 3.00 | 136 |

a) Alternate value, 4.67 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |

HORIZON; August 23, 1952; 1554 GCT; 18°01.5'N, 108°59'W; sounding, 1952 fm; wind, 130°, force 4; weather, rain; sea, rough; wire angle, 25°. 213

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.23 | 4.55 | | | 0 | 28.23 | 4.55 | | |
| 9 | 28.22 | 4.54 | | | 10 | 28.22 | 4.55 | | |
| 23 | 25.80 | 5.14 | | | 20 | 28.03 | 5.13 | | |
| 50 | 19.12 | 3.64 | | | 30 | 24.45 | 5.06 | | |
| 71 | 16.52 | 2.15 | | | 50 | 19.12 | 3.64 | | |
| 97 | 13.87 | 0.68 | | | 75 | 16.10 | 1.90 | | |
| 144 | 12.31 | 0.09 | | | 100 | 13.70 | 0.60 | | |
| 190 | 11.65 | 0.10 | | | 150 | 12.24 | 0.09 | | |
| 284 | 10.52 | 0.10 | | | 200 | 11.52 | 0.10 | | |
| 380 | 9.29 | 0.09 | | | 250 | 10.90 | 0.10 | | |
| 473 | 7.94 | 0.09 | | | 300 | 9.71 | 0.10 | | |
| 564 | 6.96 | 0.09 | | | 400 | 8.99 | 0.09 | | |
| 746 | 5.66 | 0.12 | | | 500 | 7.63 | 0.09 | | |
| 927 | 4.77 | 0.18 | | | 600 | 6.66 | 0.10 | | |
| 1106 | 4.07 | 0.43 | | | 700 | 5.94 | 0.12 | | |
| | | | | | 800 | 5.36 | 0.13 | | |
| | | | | | 1000 | 4.47 | 0.25 | | |

HORIZON; August 23, 1952; 2354 GCT; 19°01'N, 109°30'W; sounding, 1800 fm; wind, 140°, force 4; weather, overcast; sea, rough; wire angle, 14°. 214

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.27 | 4.57 | 0.50 | 0 | 0 | 28.27 | 4.57 | 0.50 | 0 |
| 10 | 28.29 | 4.58 | 0.46 | 0 | 10 | 28.29 | 4.58 | 0.46 | 0 |
| 24 | 26.78 | 4.88 | 0.60a) | 0 | 20 | 27.80 | 4.86 | 0.55 | 0 |
| 53 | 19.94 | 3.15 | 1.28 | 6.5 | 30 | 25.60 | 4.82 | 0.68 | 0.8 |
| 76 | 15.67 | 0.37 | 2.36 | 19.1 | 50 | 21.13 | 3.70 | 1.20 | 9.5 |
| 104 | 13.72 | 0.10 | 2.48 | 26.8 | 75 | 15.69 | 0.41 | 2.35 | 19 |
| 157 | 12.27 | 0.12 | 2.54 | 29.3 | 100 | 14.03 | 0.12 | 2.47 | 26 |
| 208 | 11.65 | 0.11 | 2.60 | 33.1 | 150 | 12.38 | 0.12 | 2.53 | 29 |
| 311 | 10.39 | 0.11 | 2.68 | 40.0 | 200 | 11.77 | 0.11 | 2.59 | 32 |
| 419 | 8.86 | 0.15 | 2.80 | 52.0 | 250 | 11.17 | 0.11 | 2.63 | 36 |
| 522 | 7.50 | 0.11 | 2.89 | 65.0 | 300 | 10.53 | 0.11 | 2.67 | 39 |
| 625 | 6.65 | 0.10 | 2.98 | 76.0 | 400 | 9.14 | 0.14 | 2.78 | 50 |
| 828 | 5.34 | 0.12 | 3.04 | 92.5 | 500 | 7.76 | 0.12 | 2.86 | 62 |
| 1035 | 4.39 | 0.28 | 3.10 | 110.3 | 600 | 6.85 | 0.10 | 2.97 | 74 |
| 1228 | 3.76 | 0.61 | 3.10 | 122.8 | 700 | 6.13 | 0.10 | 3.01 | 82 |
| 1571 | 2.87 | 1.29 | 3.03 | 139.9 | 800 | 5.51 | 0.11 | 3.03 | 90 |
| | | | | | 1000 | 4.51 | 0.23 | 3.10 | 107 |
| | | | | | 1200 | 3.84 | 0.56 | 3.10 | 121 |
| | | | | | 1500 | 3.02 | 1.17 | 3.03 | 136 |

HORIZON; August 24, 1952; 0754 GCT; 20°01.5'N, 110°02'W; sounding, 1490 fm; wind, 160°, force 2; weather, rain; sea, moderate; wire angle, 16°. 215

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.87 | 4.65 | | | 0 | 26.87 | 4.65 | | |
| 10 | 26.88 | 4.67 | | | 10 | 26.88 | 4.67 | | |
| 24 | 23.67 | 5.30 | | | 20 | 26.82 | 5.05 | | |
| 51 | 18.14 | 5.52 | | | 30 | 22.55 | 5.37 | | |
| 74 | 14.48 | 4.31 | | | 50 | 18.52 | 5.52 | | |
| 102 | 13.06 | 2.43 | | | 75 | 14.43 | 4.25 | | |
| 153 | 12.34 | 0.25 | | | 100 | 13.12 | 4.60 | | |
| 205 | 11.64 | 0.16 | | | 150 | 12.41 | 0.26 | | |
| 309 | 10.30 | 0.10 | | | 200 | 11.72 | 0.17 | | |
| 418 | 8.66 | 0.10 | | | 250 | 11.07 | 0.12 | | |
| 522 | 7.42 | 0.11 | | | 300 | 10.44 | 0.10 | | |
| 627 | 6.32 | 0.15 | | | 400 | 8.90 | 0.10 | | |
| 833 | 4.98 | 0.24 | | | 500 | 7.67 | 0.11 | | |
| 1036 | 4.14 | 0.40 | | | 600 | 6.58 | 0.13 | | |
| 1233 | 3.57 | 0.69 | | | 700 | 5.79 | 0.18 | | |
| 1571 | 2.80 | 1.32 | | | 800 | 5.17 | 0.23 | | |
| | | | | | 1000 | 4.27 | 0.36 | | |
| | | | | | 1200 | 3.65 | 0.64 | | |
| | | | | | 1500 | 2.94 | 1.21 | | |



a) Mean value of 0.55 and 0.66 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | Z m | T °C | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L |
| 216 | HORIZON; August 24, 1952; 1550 GCT; 21°02'N, 110°34.5'W; sounding, 1670 fm; wind, 120°, force 3; weather, overcast; sea, rough; wire angle, 09°. | | | | | | | | |
| 0 | 27.96 | 4.56 | 0.44 | 0 | 0 | 27.96 | 4.55 | 0.44 | 0 |
| 10 | 27.97 | 4.57 | 0.43 | 0 | 10 | 27.97 | 4.56 | 0.43 | 0 |
| 24 | 24.72 | 5.08 | 0.42 | 0 | 20 | 26.60 | 5.06 | 0.42 | 0 |
| 53 | 19.18 | 4.61 | 0.81 | 2.2 | 30 | 22.90 | 5.07 | 0.44 | 0.3 |
| 76 | 16.65 | 3.24 | 1.33 | 8.6 | 50 | 19.64 | 4.75 | 0.72 | 2.1 |
| 104 | 13.94 | 1.56 | 2.04 | 20.0 | 75 | 16.67 | 3.30 | 1.32 | 8.4 |
| 156 | 12.24 | 0.54 | 2.45 | 30.4 | 100 | 14.22 | 1.75 | 1.96 | 18.4 |
| 207 | 11.46 | 0.34 | 2.55 | 35.5 | 150 | 12.37 | 0.59 | 2.41 | 29 |
| 309 | 10.14 | 0.15 | 2.64 | 42.5 | 200 | 11.55 | 0.35 | 2.54 | 35 |
| 416 | 8.69 | 0.15 | 2.82 | 54.7 | 250 | 10.91 | 0.24 | 2.59 | 38 |
| 518 | 7.40 | 0.12 | 2.90 | 67.3 | 300 | 10.26 | 0.16 | 2.63 | 42 |
| 621 | 6.32 | 0.15 | 2.98 | 79.6 | 400 | 8.89 | 0.15 | 2.80 | 53 |
| 821 | 5.11 | 0.20 | 3.06 | 98.6 | 500 | 7.63 | 0.12 | 2.89 | 65 |
| 1022 | 4.18 | 0.38 | 3.10 | 115.9 | 600 | 6.52 | 0.15 | 2.96 | 77 |
| 1216 | 3.66 | 0.66 | 3.18 | 126.4 | 700 | 5.81 | 0.16 | 3.02 | 88 |
| 1558 | 2.88 | 1.22 | 3.11 | 143.5 | 800 | 5.24 | 0.20 | 3.06 | 97 |
| | | | | | 1000 | 4.26 | 0.36 | 3.10 | 114 |
| | | | | | 1200 | 3.71 | 0.64 | 3.18 | 125 |
| | | | | | 1500 | 3.01 | 1.15 | 3.12 | 140 |
| 217 | HORIZON; August 25, 1952; 0156 GCT; 22°18.5'N, 111°09'W; sounding, 1800 fm; wind, 120°, force 2; weather, cloudy; sea, rough; wire angle, 11°. | | | | | | | | |
| 0 | 27.56 | 4.64 | | | 0 | 27.56 | 4.64 | | |
| 9 | 27.30 | 4.68 | | | 10 | 27.29 | 4.69 | | |
| 24 | 23.90 | 5.36 | | | 20 | 26.00 | 5.14 | | |
| 51 | 17.93 | 5.62 | | | 30 | 22.95 | 5.44 | | |
| 75 | 17.52 | 2.97 | | | 50 | 17.97 | 5.62 | | |
| 103 | 15.26 | 1.21 | | | 75 | 17.52 | 2.97 | | |
| 157 | 12.12 | 0.56 | | | 100 | 15.54 | 1.32 | | |
| 208 | 11.61 | 0.19 | | | 150 | 12.17 | 0.49 | | |
| 311 | 9.66 | 0.28 | | | 200 | 11.72 | 0.19 | | |
| 416 | 8.32 | 0.18 | | | 250 | 10.78 | 0.22 | | |
| 518 | 7.07 | 0.16 | | | 300 | 9.83 | 0.27 | | |
| 619 | 6.30 | - | | | 400 | 8.53 | 0.19 | | |
| 816 | 5.21 | 0.20 | | | 500 | 7.25 | 0.16 | | |
| 1017 | 4.30 | 0.39 | | | 600 | 6.44 | 0.16 | | |
| 1211 | 3.79 | 0.58 | | | 700 | 5.82 | 0.16 | | |
| 1549 | 2.98 | 1.17 | | | 800 | 5.29 | 0.19 | | |
| | | | | | 1000 | 4.36 | 0.37 | | |
| | | | | | 1200 | 3.82 | 0.56 | | |
| | | | | | 1500 | 3.09 | 1.07 | | |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

HORIZON; October 13, 1952; 2201, 2315 GCT; 14°16'N, 169°25'E; sounding, 2990 fm; wind, 050°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°, 23°.

| | | | | |
|---|---|---|---|---|
| 0 | 28.30 | | 0 | 28.30 |
| 9 | 28.32 | | 10 | 28.32 |
| 23 | 28.29 | | 20 | 28.30 |
| 46 | 28.27 | | 30 | 28.28 |
| 68 | 28.25 | | 50 | 28.27 |
| 90 | 27.21 | | 75 | 28.10 |
| 267 | 14.20 | | 100 | (26.60) |
| 357 | 9.80a) | | 150 | (23.50) |
| 448 | 8.00 | | 200 | (20.05) |
| 548 | 6.66 | | 250 | (15.95) |
| | | | 300 | 11.81 |
| 465b) | 7.87 | | 400 | 8.93 |
| 558 | 6.58 | | 500 | 7.25 |
| 694 | 5.73 | | 600 | 6.23 |
| 738 | 5.55 | | 700 | 5.72 |
| 783 | 5.25 | | 800 | 5.18 |
| 827 | 5.10 | | 1000 | 4.42 |
| 871 | 4.94 | | | |
| 916 | 4.72 | | | |
| 968 | 4.54 | | | |
| 1110 | 3.95 | | | |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

HORIZON; October 15, 1952; 0123, 0301 GCT; 12°14.5'N, 164°50'E; sounding, 1800 fm; wind, 060°, force 3; weather, overcast; sea, moderate; wire angle, 11°, 27°. 1 2

| | | | | |
|---|---|---|---|---|
| 0 | 28.78 | | 0 | 28.78 |
| 9 | 28.65 | | 10 | 28.64 |
| 24 | 28.62 | | 20 | 28.63 |
| 49 | 28.65 | | 30 | 28.63 |
| 73 | 28.35 | | 50 | 28.65 |
| 97 | 27.01 | | 75 | 28.23 |
| 150 | 22.57 | | 100 | 26.79 |
| 199 | 16.12 | | 150 | 22.57 |
| 246 | 11.69 | | 200 | 15.95 |
| 292 | 10.37 | | 250 | 11.57 |
| 391 | 8.70 | | 300 | 10.20 |
| 484 | 7.94 | | 400 | 8.62 |
| 587 | 6.86 | | 500 | 7.89 |
| | | | 600 | 6.98 |
| 456b) | 8.33 | | 700 | 6.36 |
| 549 | 7.67 | | 800 | 5.77 |
| 684 | 6.41 | | 1000 | 4.55 |
| 729 | 6.24 | | | |
| 773 | 5.95 | | | |
| 819 | 5.64 | | | |
| 865 | 5.29 | | | |
| 911 | 4.95 | | | |
| 962 | 4.70 | | | |
| 1110 | 4.14 | | | |

HORIZON; November 26, 1952; 2209 GCT; 6°19'N, 168°25.5'E; sounding, 2615 fm; wind, 090°, force 3; weather, overcast; sea, rough; wire angle, 02°.

| | | | |
|---|---|---|---|
| 0 | 28.72 | 0 | 28.72 |
| 9 | 28.70 | 10 | 28.70 |
| 24 | 28.70 | 20 | 28.70 |
| 79 | 28.48 | 30 | 28.70 |
| 109 | 25.43 | 50 | 28.67 |
| 163 | 16.10 | 75 | 28.55 |
| 216 | 10.94 | 100 | 26.40 |
| | | 150 | 18.50 |
| | | 200 | 12.10 |

HORIZON; November 27, 1952; 2145 GCT; 2°55'N, 168°52'E; sounding, 2340 fm; wind, 090°, force 3; weather, partly cloudy; sea, moderate; wire angle, 26°. 3 4

| | | | | | |
|---|---|---|---|---|---|
| 0 | 29.16 | - | 0 | 29.16 | |
| 8 | 29.16 | 3.78 | 10 | 29.15 | 3.78 |
| 23 | 28.99 | 3.87 | 20 | 29.03 | 3.85 |
| 44 | 28.93 | 3.88 | 30 | 28.97 | 3.88 |
| 67 | 28.62 | 4.05 | 50 | 28.91 | 3.90 |
| 89 | 28.09 | 3.82 | 75 | 28.43 | 4.00 |
| 137 | 26.18 | 3.78 | 100 | 27.80 | 3.80 |
| 180 | 19.07 | 3.22 | 150 | 24.25 | 3.69 |
| 268 | 10.88 | 2.41 | 200 | 16.10 | 2.95 |
| 360 | 9.77 | 2.35 | 250 | 11.45 | 2.49 |
| 447 | 8.66 | 2.72 | 300 | 10.39 | 2.37 |
| 540 | 7.92 | 2.38 | 400 | 9.22 | 2.51 |
| 724 | 5.98 | 1.78 | 500 | 8.23 | 2.57 |
| 906 | 5.02 | 1.73 | 600 | 7.27 | 2.12 |
| 1103 | 4.18 | 2.12 | 700 | 6.17 | 1.82 |
| | | | 800 | 5.55 | 1.75 |
| | | | 1000 | 4.62 | 1.88 |

a) Alternate value, 9.64°C, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.

SIO

CAPRICORN

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

5

HORIZON; December 1, 1952; 0320, 0043 GCT; 0°02.5'N, 169°00'E; sounding, 2380 fm; wind, 060°, force 1; weather, partly cloudy; sea, slight; wire angle, 10°, 11°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 29.19 | 4.74 | 0 | 29.19 | 4.74 |
| 10 | 28.98 | 4.76 | 10 | 28.98 | 4.76 |
| 24 | 28.90 | 4.68 | 20 | 28.91 | 4.70 |
| 49 | - | 4.62 | 30 | 28.89 | 4.67 |
| 73 | 28.85 | 4.52 | 50 | 28.88 | 4.62 |
| 99 | 28.60 | 4.39 | 75 | 28.84 | 4.51 |
| 152 | 25.19 | 2.98 | 100 | 28.47 | 4.38 |
| 200 | 16.42 | 3.22 | 150 | 25.40 | 2.98 |
| 267 | 13.44 | 3.26 | 200 | 16.42 | 3.22 |
| 396 | 10.04 | 1.65 | 250 | 14.01 | 3.26 |
| 490 | 8.82 | 1.54 | 300 | 12.40 | 3.01 |
| 587 | 7.04 | 1.86 | 400 | 9.99 | 1.64 |
| 780 | 5.35 | 2.27 | 500 | 8.68 | 1.55 |
| 973 | 4.66 | 2.18 | 600 | 7.10 | |
| 1174 | 3.85 | 2.29 | 700 | 6.05 | |
| | | | 800 | 5.40 | |
| 638a) | 6.93 | 1.68 | 1000 | 4.62 | |
| 1050 | 4.51 | 1.86 | 1200 | 3.79 | |
| 1257 | 3.64 | - | 1500 | 3.15 | 2.21 |
| 1567 | 3.01 | 2.21 | 2000 | 2.25 | 2.59 |
| 1826 | 2.44 | 2.49 | 2500 | 1.88 | 2.83 |
| 2083 | 2.17 | 2.63 | 3000 | 1.65 | 3.20 |
| 2346 | 1.96 | 2.81 | | | |
| 2610 | 1.84 | 2.86 | | | |
| 2905 | 1.69 | 3.12 | | | |
| 3250 | 1.60 | 3.35 | | | |

6

HORIZON; December 3, 1952; 0553 GCT; 2°00'S, 170°19'E; sounding, 2235 fm; wind, 090°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 29.54 | 4.62 | 0 | 29.54 | 4.62 |
| 8 | 29.38 | 4.60 | 10 | 29.36 | 4.60 |
| 23 | 29.31 | 4.58 | 20 | 29.32 | 4.58 |
| 46 | 29.29 | 4.53 | 30 | 29.30 | 4.57 |
| 69 | 29.24 | 4.53 | 50 | 29.28 | 4.53 |
| 92 | 29.23 | 4.54 | 75 | 29.24 | 4.53 |
| 141 | 28.44 | 4.20 | 100 | 29.21 | 4.53 |
| 187 | 23.05 | 2.96 | 150 | 27.20 | 3.97 |
| 276 | 12.68 | 3.25 | 200 | 21.45 | 2.98 |
| 364 | 10.62 | 2.16 | 250 | 15.30 | 3.19 |
| 454 | 9.66 | 2.68 | 300 | 11.83 | 3.05 |
| 545 | 7.58 | 2.62 | 400 | 10.20 | 2.37 |
| 724 | 5.76 | 2.62 | 500 | 8.67 | 2.65 |
| 907 | 4.71 | 2.45 | 600 | 6.88 | 2.62 |
| 1101 | 4.10 | 2.49 | 700 | 5.95 | 2.62 |
| | | | 800 | 5.27 | 2.55 |
| | | | 1000 | 4.33 | 2.47 |

7

HORIZON; December 4, 1952; 2239 GCT; 6°10'S, 172°55'E; sounding, 2950 fm; wind, 120°, force 4; weather, partly cloudy; sea, moderate; wire angle, 22°

| | | |
|---|---|---|
| 3982 | 1.33 | 3.92 |
| 4252 | 1.27 | 4.21 |
| 4525 | 1.24 | 4.23 |
| 4823b) | 1.28 | 4.37 |
| 5172b) | 1.32 | 4.38 |

8

HORIZON; December 9, 1952; 1228 GCT; 12°08'S, 175°16'E; sounding, 1750 fm; wind, 140°, force 2; weather, missing; sea, slight; wire angle, 06°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 29.00 | - | | | |
| 10 | 28.99 | 4.34 | | | |
| 108 | 27.93 | 4.16 | | | |
| 292 | 18.01 | 3.42 | | | |
| 387 | 11.62 | 2.71 | | | |
| 573 | 6.24 | 3.79 | | | |
| 757 | 5.26 | 3.39 | | | |
| 1082 | 3.95 | 3.23 | | | |
| 1339 | 3.18 | 3.22 | | | |
| 1594 | 2.68 | 3.24 | | | |
| 2112 | 2.09 | 3.36 | | | |
| 2736 | 1.76 | 3.29 | | | |
| 2785 | 1.74 | 3.39 | | | |
| 2833 | 1.71 | 3.50 | 600 | 6.07 | 3.77 |
| 2881 | 1.72 | 3.47 | 700 | 5.53 | 3.51 |
| 2931 | 1.68 | 3.45 | 800 | 5.05 | 3.35 |
| | | | 1000 | 4.24 | 3.25 |
| | | | 1200 | 3.57 | 3.22 |
| | | | 1500 | 2.84 | 3.23 |
| | | | 2000 | 2.18 | 3.34 |
| | | | 2500 | 1.83 | 3.31 |

a) Overlapping casts; reconciliation of property curves when necessary.

b) The last two depths are slightly uncertain because of malfunction of the two unprotected reversing thermometers.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

HORIZON; December 10, 1952; 2252 GCT; 16°56.5'S, 175°54.5'E; sounding, 1610 fm; wind, 070°, force 3; weather, missing; sea, slight; wire angle, 33°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 28.15 | 4.54 | 0 | 28.15 | 4.54 |
| 8 | 28.16 | 4.55 | 10 | 28.15 | 4.55 |
| 21 | 28.00 | 4.48 | 20 | 28.04 | 4.48 |
| 46 | 27.05 | 4.77 | 30 | 27.70 | 4.54 |
| 67 | 26.21 | 4.92 | 50 | 26.88 | 4.82 |
| 92 | 25.88 | 4.82 | 75 | 26.09 | 4.90 |
| 137 | 24.25 | 4.39 | 100 | 25.70 | 4.75 |
| 180 | 22.25 | 4.16 | 150 | 23.56 | 4.32 |
| 263 | 19.37 | 3.77 | 200 | 21.50 | 4.04 |
| 352 | 15.56 | 4.04 | 250 | 19.83 | 3.79 |
| 439 | 12.02 | 3.51 | 300 | 17.93 | 3.88 |
| 527 | 9.05 | 3.70 | 400 | 13.56 | 3.73 |
| 702 | 5.82 | 4.19 | 500 | 9.87 | 3.61 |
| 885 | 4.64 | 3.87 | 600 | 7.36 | 3.97 |
| 1066 | 3.84 | 3.72 | 700 | 5.85 | 4.19 |
| | | | 800 | 5.10 | 4.05 |
| | | | 1000 | 4.11 | 3.74 |

HORIZON; January 12, 1953; 0151 GCT; 16°07'S, 165°13'W; sounding, 3000 fm; wind, 040°, force 2; weather, cloudy; sea, moderate; wire angle, 17°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 29.04 | 4.07 | 0 | 29.04 | 4.07 |
| 9 | 28.37 | 3.99 | 10 | 28.35 | 3.98 |
| 24 | 28.30 | 3.80 | 20 | 28.31 | 3.83 |
| 52 | 28.27 | 3.91 | 30 | 28.29 | 3.81 |
| 76 | 27.69 | 4.12 | 50 | 28.27 | 3.89 |
| 104 | 26.58 | 4.16 | 75 | 27.71 | 4.12 |
| 152 | 24.86 | 3.79 | 100 | 26.78 | 4.16 |
| 202 | 22.28 | 3.66 | 150 | 24.92 | 3.81 |
| 299 | 16.58 | 3.71 | 200 | 22.40 | 3.66 |
| 397 | 11.70 | 3.31 | 250 | 19.49 | 3.68 |
| 493 | 8.53 | 3.03 | 300 | 16.52 | 3.71 |
| 589 | 6.82 | 3.29 | 400 | 11.57 | 3.30 |
| 780 | 4.90 | 3.51 | 500 | 8.38 | 3.05 |
| 976 | 4.00 | 3.29 | 600 | 6.67 | 3.32 |
| 1170 | 3.42 | 3.26 | 700 | 5.60 | 3.47 |
| | | | 800 | 4.79 | 3.50 |
| | | | 1000 | 3.92 | 3.28 |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

HORIZON; December 19, 1952; 0757 GCT; 20°23'S, 178°11.5'E; sounding, 1960 fm; wind, 310°, force 2; weather, drizzle; sea, slight; wire angle, 20°. 9 10

| | | | | | |
|---|---|---|---|---|---|
| 0 | 27.50 | 4.59 | 0 | 27.50 | 4.59 |
| 9 | 27.34 | 4.50 | 10 | 27.31 | 4.50 |
| 47 | 24.03 | - | 20 | 26.78 | 4.52 |
| 94 | 22.41 | 4.67 | 30 | 25.80 | (4.54) |
| 193 | 20.23 | 3.93 | 50 | 23.85 | (4.59) |
| 281 | 17.95 | 3.97 | 75 | 22.90 | (4.65) |
| 456 | 12.06 | 4.19 | 100 | 22.28 | 4.66 |
| 722 | 6.10 | 4.63 | 150 | 21.19 | 4.25 |
| 899 | 4.84 | 4.17 | 200 | 20.08 | 3.93 |
| 1078 | 3.82 | 3.81 | 250 | 18.81 | 3.94 |
| 1453 | 2.90 | 3.33 | 300 | 17.40 | 3.98 |
| 1550 | 2.76 | 3.45 | 400 | 14.08 | 4.10 |
| 1642 | 2.62 | 3.46 | 500 | (10.52) | (4.28) |
| 1741 | 2.53 | 3.42 | 600 | (7.80) | (4.48) |
| 1840 | 2.41 | 3.41 | 700 | (6.32) | (4.62) |
| | | | 800 | 5.49 | 4.48 |
| | | | 1000 | 4.23 | 3.96 |
| | | | 1200 | 3.41 | 3.61 |
| | | | 1500 | 2.84 | 3.38 |

HORIZON; January 22, 1953; 1557 GCT; 11°59'S, 142°15'W; sounding, 2600 fm; wind, 040°, force 3; weather, cloudy; sea, rough; wire angle, 08°. 11 12

| | | | | | |
|---|---|---|---|---|---|
| 0 | 28.16 | 4.14 | 0 | 28.16 | 4.14 |
| 10 | 28.18 | 4.22 | 10 | 28.18 | 4.22 |
| 30 | 28.18 | - | 20 | 28.18 | 4.22 |
| 59 | 28.29 | 4.19 | 30 | 28.18 | 4.22 |
| 117 | 26.51 | 3.95 | 50 | 28.27 | 4.20 |
| 173 | 22.71 | 3.83 | 75 | 27.40 | 4.13 |
| 228 | 20.15 | 3.82 | 100 | 26.70 | 4.02 |
| 337 | 12.19 | 1.74 | 150 | 24.48 | 3.86 |
| 439 | 8.87 | 2.20 | 200 | 21.43 | 3.83 |
| 546 | 7.32 | 2.40 | 250 | 18.87 | 3.67 |
| 649 | 6.31 | 2.36 | 300 | 14.77 | 2.20 |
| 869 | 5.01 | 2.52 | 400 | 9.79 | 2.01 |
| 1083 | 4.20 | 2.66 | 500 | 7.92 | 2.37 |
| 1291 | 3.58 | 2.47 | 600 | 6.76 | 2.38 |
| | | | 700 | 5.95 | 2.37 |
| | | | 800 | 5.35 | 2.46 |
| | | | 1000 | 4.49 | 2.63 |
| | | | 1200 | 3.84 | 2.59 |

13

HORIZON; January 23, 1953; 1128 GCT; 12°12'S, 142°25'W; sounding, 2440 fm; wind, 040°, force 3;

14

weather, missing; sea, moderate; wire angle, 22°.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | 28.25 | 4.43 | | | |
| 94 | 26.62 | 4.59 | | | |
| 287 | - | 3.60 | | | |
| 479 | 7.96 | 1.74 | | | |
| 927 | 4.74 | 2.57 | | | |
| 1371 | 3.20 | 2.75 | | | |
| 1811 | 2.41 | 3.01 | | | |
| 2260 | 1.96 | 3.24 | | | |
| 2761 | 1.78 | 3.39 | | | |
| 3261 | 1.61 | 3.61 | | | |
| 3476 | 1.54 | 3.41 | | | |
| 3589 | 1.50 | 3.81 | | | |
| 3712 | 1.46 | 3.93 | | | |
| 3814 | 1.45 | 4.02 | | | |
| 3922 | 1.40 | 3.91 | | | |
| | | | 1000 | 4.44 | 2.60 |
| | | | 1200 | 3.70 | 2.68 |
| | | | 1500 | 2.92 | 2.82 |
| | | | 2000 | 2.18 | 3.12 |
| | | | 2500 | 1.86 | 3.29 |
| | | | 3000 | 1.70 | 3.52 |

HORIZON; January 29, 1953; 2329 GCT; 10°55'S, 130°30'W; sounding, 2160 fm; wind, 090°, force 3; weather, partly cloudy; sea, moderate; wire angle, 32°.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | 27.92 | 4.55 | | | |
| 8 | 27.68 | - | | | |
| 86 | 25.95 | 4.54 | | | |
| 258 | 15.16 | 3.27 | | | |
| 420 | 8.74 | 1.28 | | | |
| 655 | 6.33 | 1.45 | | | |
| 803 | 5.23 | 1.45 | | | |
| 1211 | 3.59 | 1.47 | | | |
| 1618 | 2.64 | 2.69 | | | |
| 2046 | 2.04 | 3.13 | | | |
| 2529 | 1.80 | 2.94 | | | |
| 2923 | 1.71 | 3.49 | | | |
| 3013 | 1.66 | 3.61 | | | |
| 3103 | 1.65 | 3.49 | | | |
| 3197 | 1.61 | 3.53 | 700 | 5.96 | 1.45 |
| | | | 800 | 5.26 | 1.45 |
| | | | 1000 | 4.32 | 1.46 |
| | | | 1200 | 3.63 | 1.47 |
| | | | 1500 | 2.87 | 2.30 |
| | | | 2000 | 2.09 | 3.12 |
| | | | 2500 | 1.82 | 2.94 |
| | | | 3000 | 1.66 | 3.60 |

15

HORIZON; February 2, 1953; 0643 GCT; 14°28'S, 120°24'W; sounding, 2030 fm; wind, 090°, force 3;

16

weather, cloudy; sea, slight; wire angle, 10°.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | 26.70 | 4.58 | 0 | 26.70 | 4.58 |
| 15 | 26.71 | 4.53 | 10 | 26.70 | 4.54 |
| 35 | 26.63 | 4.62 | 20 | 26.70 | 4.55 |
| 73 | - | 4.74 | 30 | 26.67 | 4.59 |
| 105 | 24.35 | 4.63 | 50 | 26.38 | 4.68 |
| 144 | 22.90 | 4.45 | 75 | 25.47 | 4.74 |
| 212 | 19.44 | 4.33 | 100 | 24.57 | 4.67 |
| 278 | 14.49 | 3.89 | 150 | 22.62 | 4.44 |
| 408 | 8.70 | 0.90 | 200 | 20.13 | 4.37 |
| 546 | 6.69 | 1.61 | 250 | 16.65 | 4.11 |
| 678 | 5.68 | 1.81 | 300 | 12.87 | 3.38 |
| 819 | 5.03 | 1.79 | 400 | 8.90 | 0.92 |
| 1092 | 3.82 | 2.18 | 500 | 7.21 | 1.35 |
| 1370 | 3.13 | 2.32 | 600 | 6.21 | 1.74 |
| 1655 | 2.58 | 2.78 | 700 | 5.55 | 1.80 |
| | | | 800 | 5.10 | 1.79 |
| | | | 1000 | 4.20 | 2.05 |
| | | | 1200 | 3.49 | 2.23 |
| | | | 1500 | 2.89 | 2.48 |

HORIZON; February 11, 1953; 0823, 0554 GCT; 1°03'S, 123°52'W; sounding, 2500 fm; wind, 090°, force 3; weather, missing; sea, slight; wire angle, 15°, 24°.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | 25.15 | 4.61 | 0 | 25.15 | 4.61 |
| 9 | 25.14 | 4.56 | 10 | 25.14 | 4.56 |
| 24 | 24.89 | 4.66 | 20 | 25.00 | 4.64 |
| 52 | 25.89 | 4.45 | 30 | 24.79 | 4.64 |
| 75 | 24.15 | 4.05 | 50 | 24.51 | 4.48 |
| 101 | 19.66 | 2.75 | 75 | 24.15 | 4.05 |
| 124 | 16.48 | 2.54 | 100 | 19.85 | 2.77 |
| 150 | 13.64 | 2.06 | 150 | 13.64 | 2.06 |
| 198 | 12.33 | 1.37 | 200 | 12.31 | 1.37 |
| 251 | 11.98 | 1.65 | 250 | 11.99 | 1.65 |
| 298 | 11.74 | 1.24 | 300 | 11.72 | 1.22 |
| 401 | 8.88 | 0.84 | 400 | 8.91 | 0.85 |
| 502 | 7.73 | 0.84 | 500 | 7.76 | 0.84 |
| | | | 600 | | |
| 978 | 4.51 | 1.72 | 700 | | |
| 1177 | 4.00 | 1.96 | 800 | | |
| 1460 | 3.10 | 2.12 | 1000 | 4.43 | 1.73 |
| 1695 | 2.62 | 2.21 | 1200 | 3.93 | 1.97 |
| 1929 | 2.34 | 2.17 | 1500 | 3.00 | 2.14 |
| 2168 | 2.02 | 2.59 | 2000 | 2.23 | 2.25 |
| 2418 | 1.92 | 2.65 | 2500 | 1.89 | 2.72 |
| 2510 | 1.89 | 2.33u | | | |
| 2652 | 1.79 | 2.97 | | | |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

HORIZON; February 13, 1953; 0915, 0647 GCT; 4°49'N, 123°46'W; sounding, 2195 fm; wind, 040°, force 3; weather, missing; sea, slight; wire angle, 10°, 10°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 26.40 | 4.77 | 0 | 26.40 | 4.77 |
| 10 | 26.41 | 4.76 | 10 | 26.41 | 4.76 |
| 25 | - | 4.90 | 20 | 26.34 | 4.86 |
| 53 | 24.49 | 4.59 | 30 | 26.03 | 4.88 |
| 77 | 23.50 | 4.50 | 50 | 24.70 | 4.63 |
| 104 | 22.56 | 3.85 | 75 | 23.53 | 4.51 |
| 127 | 16.16 | 2.25 | 100 | 22.79 | 4.01 |
| 152 | 12.49 | 0.70 | 150 | 12.65 | 0.75 |
| 201 | 10.94 | 0.60 | 200 | 10.98 | 0.60 |
| 254 | 10.17 | 0.99 | 250 | 10.22 | 0.97 |
| 297 | 9.66 | 0.87 | 300 | 9.62 | 0.87 |
| 397 | 8.76 | 0.93 | 400 | 8.72 | 0.93 |
| 496 | 7.83 | 0.30 | 500 | 7.78 | 0.30 |
| 597 | 6.84 | 0.45 | 600 | 6.86 | 0.51 |
| 796 | 5.34 | 1.08 | 700 | 6.02 | 0.82 |
| | | | 800 | 5.32 | 1.10 |
| 599a) | 6.98 | 0.57 | 1000 | 4.46 | 1.43 |
| 983 | 4.52 | 1.41 | 1200 | 3.83 | 1.55 |
| 1172 | 3.92 | 1.53 | 1500 | 3.02 | 1.74 |
| 1460 | 3.12 | 1.71 | 2000 | 2.27 | 2.05 |
| 1704 | 2.65 | 1.99 | 2500 | 1.88 | 2.61 |
| 1952 | 2.32 | 2.01 | | | |
| 2204 | 2.07 | 2.38 | | | |
| 2457 | 1.88 | 2.59 | | | |
| 2553 | 1.88 | 2.62 | | | |
| 2695 | 1.84 | 2.53 | | | |

SPENCER F. BAIRD; December 21, 1952; 0335, 0550 GCT; 21°59'S, 178°32'E; sounding, 2230 fm; wind, 340°, force 1; weather, missing; sea, rough; wire angle, 07°, missing.

| | |
|---|---|
| 1347 | 3.12 |
| 1792 | 2.46 |
| | |
| 2261 | 2.08 |
| 2696 | 1.89 |
| 2879 | 1.85 |
| 3066 | 1.84 |
| 3253 | 1.83 |
| 3631 | 1.84 |

SPENCER F. BAIRD; January 2, 1953; 1350 GCT; 20°08'S, 173°03.5'W; sounding, 5000 fm; wind, missing; weather, missing; sea, missing; wire angle, 20°.

| | |
|---|---|
| 0 | 27.6 |
| 10 | 27.54 |
| 25 | 27.47 |
| 47 | 26.18 |
| 91 | 24.44 |
| 175 | 21.51 |
| 341 | 16.22 |
| 505 | 10.43 |
| 832 | 5.03 |
| 1000 | 4.05 |
| 1257 | 3.09 |
| 2139 | 2.17 |

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |

HORIZON; February 14, 1953; 1510, 1247 GCT; 7°58'N, 124°02'W; sounding, 2350 fm; wind, 040°, force 5; weather, cloudy; sea, very rough; wire angle; 30°, 40°. 17 18

| | | | | | |
|---|---|---|---|---|---|
| 0 | 26.45 | 4.70 | 0 | 26.45 | 4.70 |
| 8 | 26.45 | 4.71 | 10 | 26.44 | 4.71 |
| 22 | - | 4.71 | 20 | 25.10 | 4.71 |
| 48 | 20.42 | 4.61 | 30 | 21.85 | 4.70 |
| 70 | 20.23 | 4.11 | 50 | 20.40 | 4.59 |
| 93 | 14.42 | 1.57 | 75 | 20.12 | 3.85 |
| 113 | 12.84 | 0.30 | 100 | 13.65 | 0.83 |
| 134 | 12.10 | 0.59 | 150 | 11.82 | 0.67 |
| 193 | 11.19 | 0.70 | 200 | 11.01 | 0.67 |
| 217 | 10.57 | 0.59 | 250 | 10.22 | 0.56 |
| 254 | 10.18 | 0.55 | 300 | 9.81 | 0.40 |
| 344 | 9.41 | 0.22 | 400 | 8.81 | 0.13 |
| 432 | 8.38 | 0.11 | 500 | 7.59 | 0.13 |
| 523 | 7.32 | 0.14 | 600 | 6.62 | 0.18 |
| 715 | 5.73 | 0.30 | 700 | 5.84 | 0.28 |
| | | | 800 | 5.25 | 0.40 |
| 467a) | 8.06 | 0.13 | 1000 | 4.38 | 0.76 |
| 781 | 5.34 | 0.34 | 1200 | 3.72 | 1.15 |
| 947 | 4.59 | 0.66 | 1500 | 2.98 | 1.52 |
| 1195 | 3.74 | 1.14 | 2000 | 2.20 | 2.09 |
| 1412 | 3.18 | 1.51 | | | |
| 1630 | 2.71 | 1.54 | | | |
| 1862 | 2.39 | 1.98 | | | |
| 2105 | 2.08 | 2.19 | | | |
| 2197 | 2.02 | 2.28 | | | |
| 2340 | 1.92 | 2.32 | | | |

SPENCER F. BAIRD; December 28, 1952; 2321 GCT; 19°39'S, 174°53'W; sounding, 934 fm; wind, 220°, force 2; weather, cloudy; sea, moderate; wire angle, 17°. 10BB 14B

| | | | |
|---|---|---|---|
| 568 | 8.48 | 600 | 7.70 |
| 655 | 6.54 | 700 | 6.09 |
| 825 | 5.17 | 800 | 5.33 |
| 995 | 4.29 | 1000 | 4.26 |
| 1172 | 3.62 | 1200 | 3.51 |
| 1261 | 3.24 | 1500 | 2.75 |
| 1351 | 3.04 | | |
| 1442 | 2.85 | | |
| 1533 | 2.71 | | |
| 1625 | 2.66 | | |

SPENCER F. BAIRD; January 3, 1953; 0228 GCT; 19°25'S, 173°00'W; sounding, 3820 fm; wind, missing; weather, missing; sea, missing; wire angle, 22°. 20 21

| | | | |
|---|---|---|---|
| 1789 | 2.44 | 2000 | 2.24 |
| 2234 | 2.08 | 2500 | 1.95 |
| 2698 | 1.86 | 3000 | 1.73 |
| 3169 | 1.65 | 4000 | 1.23 |
| 3661 | 1.40 | | |
| 3898 | 1.28 | | |
| 4143 | 1.17 | | |
| 4305 | 1.12 | | |

a) Overlapping casts; reconciliation of property curves when necessary.

SPENCER F. BAIRD; January 4, 1953; 1320 GCT; 19°16.5'S, 172°55'W; sounding, 4910 fm; wind, missing; weather, missing; sea, missing; wire angle, 13°.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 4799 | 1.08 | | | | |
| 5752 | 1.14 | | | | |
| 6165a) | 1.19 | | | | |
| 6740a) | 1.26 | | | | |
| 7235a) | 1.33 | | | | |

SPENCER F. BAIRD; February 4, 1953; 2245 GCT; 14°16'S, 130°46'W; sounding, 1650 fm; wind, 030°, force 2; weather, partly cloudy; sea, moderate; wire angle, 32°.

| OBSERVED | | | INTERPOLATED | | |
|---|---|---|---|---|---|
| Z m | T °C | $O_2$ ml/L | Z m | T °C | $O_2$ ml/L |
| 0 | 25.90 | | 0 | 25.90 | |
| 8 | 25.69 | | 10 | (25.64) | |
| 86 | 23.45 | | 20 | (25.38) | |
| 259 | 14.30 | | 30 | (25.10) | |
| 434 | 8.12 | | 50 | (24.60) | |
| 707 | 5.55 | | 75 | (23.85) | |
| 884 | 4.77 | | 100 | (22.70) | |
| 1068 | 4.16 | | 150 | (20.05) | |
| 1353 | 3.29 | | 200 | (17.40) | |
| 1822 | 2.39 | | 250 | (14.80) | |
| 2318 | 1.89 | | 300 | (12.10) | |
| 2877 | 1.82 | | 400 | 8.80 | |
| | | | 500 | 7.25 | |
| | | | 600 | 6.25 | |
| | | | 700 | 5.58 | |
| | | | 800 | 5.10 | |
| | | | 1000 | 4.38 | |
| | | | 1200 | 3.74 | |
| | | | 1500 | 2.95 | |
| | | | 2000 | 2.15 | |
| | | | 2500 | 1.85 | |

a) The last three depths are slightly uncertain because of malfunction of the three unprotected reversing thermometers.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; January 27, 1952; 2103 GCT; 7°57'N, 154°57'W; wind, 070°, 24 kt; weather, cloudy; sea, rough; wire angle, 12°. 1

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.43 | 34.18 | 0.39 | 21.98 | 0 | 27.43 | 34.18 | 21.98 | 584 | 0.00 |
| 11 | 27.44 | 34.18 | 0.45 | 21.98 | 10 | 27.42 | 34.18 | 21.99 | 584 | 0.06 |
| 26 | 27.40 | 34.20 | 0.45 | 22.01 | 20 | 27.42 | 34.19 | 22.00 | 584 | 0.12 |
| 55 | 27.17 | 34.29 | 0.61 | 22.15 | 30 | 27.40 | 34.20 | 22.01 | 582 | 0.18 |
| 109 | 13.35 | 34.44 | 2.31 | 25.91 | 50 | 27.20 | 34.27 | 22.13 | 571 | 0.29 |
| 215 | 10.25 | 34.66 | 2.34 | 26.66 | 75 | 25.10 | 34.51 | 22.96 | 491 | 0.42 |
| 321 | 9.16 | 34.63 | 2.48 | 26.82 | 100 | 15.58 | 34.46 | 25.45 | 254 | 0.52 |
| 432 | 8.39 | 34.56 | 2.63 | 26.89 | 150 | 11.94 | 34.49 | 26.23 | 180 | 0.63 |
| 538 | 7.35 | 34.53 | 2.85 | 27.02 | 200 | 10.61 | 34.63 | 26.57 | 142 | 0.71 |
| 646 | 6.45 | 34.47 | 3.02 | 27.10 | 250 | 9.79 | 34.66 | 26.74 | 131 | 0.79 |
| 853 | 5.04 | 34.52 | 3.24 | 27.31 | 300 | 9.35 | 34.65 | 26.81 | 124 | 0.85 |
| 1064 | 4.14 | 34.51 | 3.05 | 27.40 | 400 | 8.62 | 34.58 | 26.87 | 119 | 0.98 |
| 1266 | 3.54 | 34.54 | 2.93 | 27.49 | 500 | 7.71 | 34.54 | 26.98 | 109 | 1.10 |
| | | | | | 600 | 6.87 | 34.49 | 27.06 | 101 | 1.22 |
| | | | | | 700 | 6.03 | 34.48 | 27.16 | 92 | 1.33 |
| | | | | | 800 | 5.33 | 34.51 | 27.27 | 81 | 1.42 |
| | | | | | 1000 | 4.41 | 34.52 | 27.38 | 70 | 1.60 |

HUGH M. SMITH; January 28, 1952; 0647 GCT; 6°55'N, 154°57'W; wind, 030°, 22 kt; weather, slight rain showers; sea, rough; wire angle, 17°. 2

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.93 | 34.65 | 0.34 | 22.18 | 0 | 27.93 | 34.65 | 22.18 | 566 | 0.00 |
| 11 | 27.96 | 34.60 | 0.32a) | 22.13 | 10 | 27.95 | 34.60 | 22.13 | 570 | 0.06 |
| 25 | 27.94 | 34.60 | 0.36 | 22.13 | 20 | 27.95 | 34.60 | 22.13 | 570 | 0.11 |
| 53 | 27.96 | 34.59 | 0.47 | 22.12 | 30 | 27.95 | 34.60 | 22.13 | 570 | 0.17 |
| 105 | 20.08 | 34.74 | 0.72 | 24.56 | 50 | 27.96 | 34.59 | 22.12 | 572 | 0.29 |
| 209 | 10.24 | 34.55 | 2.32 | 26.58 | 75 | 27.61 | 34.68 | 22.30 | 554 | 0.43 |
| 313 | 9.18 | 34.62 | 2.56 | 26.81 | 100 | 21.00 | 34.77 | 24.34 | 360 | 0.54 |
| 423 | 8.34 | 34.57 | 2.79b) | 26.91 | 150 | 12.70 | 34.53 | 26.11 | 191 | 0.68 |
| 530 | 7.63 | 34.50 | 2.97 | 26.96 | 200 | 10.38 | 34.55 | 26.55 | 149 | 0.77 |
| 637 | 6.79 | 34.52 | 3.08 | 27.09 | 250 | 9.78 | 34.58 | 26.68 | 137 | 0.84 |
| 1052c) | 4.38 | 34.50 | 3.24 | 27.37 | 300 | 9.29 | 34.61 | 26.79 | 127 | 0.91 |
| | | | | | 400 | 8.50 | 34.59 | 26.89 | 117 | 1.04 |
| | | | | | 500 | 7.89 | 34.52 | 26.93 | 113 | 1.17 |
| | | | | | 600 | 7.06 | 34.51 | 27.05 | 102 | 1.28 |
| | | | | | 700 | 6.24 | 34.52 | 27.16 | 91 | 1.39 |
| | | | | | 800 | 5.50 | 34.53 | 27.27 | 82 | 1.49 |
| | | | | | 1000 | 4.48 | 34.50 | 27.36 | 73 | 1.66 |

HUGH M. SMITH; January 28, 1952; 1708 GCT; 5°53'N, 154°55'W; wind, 040°, 22 kt; weather, partly cloudy; sea, very rough; wire angle, 19°. 3

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27.84 | 34.65 | 0.40 | 22.20 | 0 | (27.84) | (34.65) | (22.20) | (564) | (0.00) |
| 9 | 27.87 | 34.66 | 0.45d) | 22.20 | 10 | 27.87 | 34.66 | 22.20 | 563 | 0.06 |
| 24 | 27.82 | 34.63 | 0.39 | 22.20 | 20 | 27.84 | 34.64 | 22.20 | 564 | 0.11 |
| 53 | 27.73 | 34.74 | 0.40 | 22.31 | 30 | 27.80 | 34.65 | 22.22 | 562 | 0.17 |
| 105 | 26.16 | 35.09 | 0.70 | 23.07 | 50 | 27.76 | 34.73 | 22.29 | 555 | 0.28 |
| 209 | 10.66 | 34.62 | 2.43 | 26.56 | 75 | 27.22 | 34.95 | 22.63 | 523 | 0.42 |
| 313 | 9.16 | 34.64 | 2.49 | 26.83 | 100 | 26.40 | 35.08 | 22.99 | 496 | 0.54 |
| 423 | 8.45 | 34.61 | 2.66 | 26.92 | 150 | 17.00 | 34.73 | 25.32 | 266 | 0.74 |
| 527 | 7.65 | 34.55 | 2.94 | 26.99 | 200 | 11.00 | 34.62 | 26.50 | 154 | 0.84 |
| 632 | 6.85 | 34.56 | 2.98 | 27.11 | 250 | 10.01 | 34.63 | 26.68 | 137 | 0.92 |
| 835 | 5.92 | 34.52 | 3.10 | 27.20 | 300 | 9.30 | 34.64 | 26.81 | 125 | 0.99 |
| 1039 | 4.40 | 34.54 | 3.18 | 27.40 | 400 | 8.58 | 34.62 | 26.91 | 116 | 1.12 |
| 1237 | 3.74 | 34.56 | 3.07e) | 27.48 | 500 | 7.92 | 34.57 | 26.97 | 110 | 1.24 |
| | | | | | 600 | 7.05 | 34.56 | 27.09 | 98 | 1.35 |
| | | | | | 700 | 6.60 | 34.55 | 27.14 | 94 | 1.46 |
| | | | | | 800 | 6.15 | 34.53 | 27.19 | 89 | 1.56 |
| | | | | | 1000 | 4.67 | 34.54 | 27.37 | 72 | 1.74 |

a) Duplicate value, 0.38 µg at/L. Duplicate phosphate values are reported when duplicate determinations of inorganic phosphate differ in extinction value by more than 0.01 (approximately 0.05 µg at/L).
b) Duplicate value, 2.86 µg at/L.
c) Two deeper Nansen bottles pretripped but were not recast.
d) Duplicate value, 0.37 µg at/L.
e) Duplicate value, 3.21 µg at/L.

4 HUGH M. SMITH; January 29, 1952; 0227 GCT; 4°55'N, 154°51'W; wind, 060°, 22 kt; weather, partly cloudy; sea, very rough; wire angle, 15°.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 27.25 | 35.08 | 0.77 | 22.72 | 0 | 27.25 | 35.08 | 22.72 | 514 | 0.00 |
| 10 | 27.26 | 35.07 | 0.71a) | 22.71 | 10 | 27.26 | 35.07 | 22.71 | 515 | 0.05 |
| 24 | 27.17 | 35.04 | 0.78b) | 22.71 | 20 | 27.20 | 35.04 | 22.71 | 516 | 0.10 |
| 52 | 27.02 | 35.04 | 0.60 | 22.76 | 30 | 27.10 | 35.04 | 22.74 | 512 | 0.16 |
| 105 | 26.71 | 35.16 | 0.79 | 22.95 | 50 | 27.02 | 35.04 | 22.76 | 510 | 0.26 |
| 207 | 10.84 | - c) | - c) | | 75 | 26.89 | 35.14 | 22.88 | 499 | 0.38 |
| 309 | 9.26 | 34.65 | 2.29d) | 26.82 | 100 | 26.77 | 35.16 | 22.94 | 494 | 0.51 |
| 416 | 8.70 | 34.60 | 2.71 | 26.87 | 150 | 22.00 | 34.94 | 24.19 | 374 | 0.73 |
| 518 | 7.99 | 34.58 | 2.91 | 26.97 | 200 | 11.90 | 34.62 | 26.33 | 170 | 0.87 |
| 620 | 7.14 | 34.57 | 3.13 | 27.08 | 250 | 9.64 | 34.65 | 26.76 | 130 | 0.95 |
| 821 | 5.79e) | 34.52 | 2.84e) | 27.22 | 300 | 9.30 | 34.65 | 26.81 | 124 | 1.01 |
| 1027 | 4.60 | 34.54 | 3.27f) | 27.38 | 400 | 8.79 | 34.61 | 26.87 | 119 | 1.14 |
| 1225 | 3.84 | 34.55 | 2.52g) | 27.46 | 500 | 8.10 | 34.58 | 26.95 | 112 | 1.27 |
| | | | | | 600 | 7.28 | 34.57 | 27.06 | 101 | 1.38 |
| | | | | | 700 | 6.57 | 34.54 | 27.14 | 94 | 1.49 |
| | | | | | 800 | 5.90 | 34.52 | 27.21 | 87 | 1.59 |
| | | | | | 1000 | 4.74 | 34.53 | 27.35 | 73 | 1.78 |

5 HUGH M. SMITH; January 29, 1952; 1128 GCT; 3°54'N, 154°51'W; wind, 040°, 15 kt; weather, partly cloudy; sea, rough; wire angle, 38°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.17 | 35.14 | 0.72 | 22.79 | 0 | 27.17 | 35.14 | 22.79 | 507 | 0.00 |
| 8 | 27.20 | 35.17 | 0.73 | 22.80 | 10 | 27.19 | 35.16 | 22.80 | 507 | 0.05 |
| 20 | 27.18 | 35.14 | 0.75 | 22.78 | 20 | 27.18 | 35.14 | 22.79 | 508 | 0.10 |
| 44 | 27.19 | 35.14 | 0.69 | 22.78 | 30 | 27.18 | 35.14 | 22.79 | 508 | 0.15 |
| 84 | 27.07 | 35.12 | 0.35 | 22.80 | 50 | 27.16 | 35.14 | 22.79 | 507 | 0.25 |
| 159 | 23.61 | 34.98 | 0.44 | 23.76 | 75 | 27.10 | 35.12 | 22.80 | 507 | 0.38 |
| 230 | 10.80 | 34.61 | 2.02 | 26.53 | 100 | 26.98 | 35.11 | 22.83 | 504 | 0.51 |
| 305 | 9.16 | 34.62 | 2.16 | 26.82 | 150 | 24.10 | 35.01 | 23.64 | 426 | 0.74 |
| 376 | 8.75 | 34.61 | 2.26 | 26.87 | 200 | 13.71 | 34.58 | 25.94 | 207 | 0.91 |
| 447 | 8.26 | 34.60 | 2.50 | 26.94 | 250 | 10.00 | 34.63 | 26.68 | 137 | 1.00 |
| 592 | 6.88h) | 34.52 | 2.83 | 27.08h) | 300 | 9.17 | 34.62 | 26.81 | 124 | 1.06 |
| 755 | 5.77 | 34.52 | 2.78 | 27.22 | 400 | 8.57 | 34.61 | 26.90 | 116 | 1.19 |
| 925 | 4.88 | 34.52 | 2.73 | 27.33 | 500 | 7.68 | 34.56 | 27.00 | 107 | 1.31 |
| | | | | | 600 | 6.85 | 34.52 | 27.08 | 99 | 1.42 |
| | | | | | 700 | 6.13 | 34.52 | 27.18 | 90 | 1.53 |
| | | | | | 800 | 5.45 | 34.52 | 27.26 | 82 | 1.62 |
| | | | | | 1000 | (4.62) | (34.52) | (27.36) | (73) | (1.80) |

a) Duplicate value, 0.63 µg at/L.
b) Duplicate value, 0.64 µg at/L.
c) Phosphate and salinity values rejected; temperature appears to be acceptable.
d) Duplicate value, 2.52 µg at/L.
e) Duplicate values: temperature, 5.82°C; phosphate, 3.14 µg at/L.
f) Duplicate value, 2.91 µg at/L.
g) Duplicate value, 2.20 µg at/L.
h) Duplicate values: temperature, 6.93°C; sigma-t, 27.07 g/L; when the corrected paired reversing thermometer readings differed by more than 0.05°C, both temperatures are reported. Sigma-t values calculated from each temperature are also reported.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; January 29, 1952; 2023 GCT; 2°56'N, 154°59'W; wind, 040°, 19 kt; weather, partly cloudy; sea, rough; wire angle, 47°. 6

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.10 | 35.08 | 22.77 | 0 | 27.10 | 35.08 | 22.77 | 510 | 0.00 |
| 8 | 27.12 | 35.07 | 22.75 | 10 | 27.10 | 35.07 | 22.76 | 510 | 0.05 |
| 20 | 27.07 | 35.08 | 22.77 | 20 | 27.07 | 35.08 | 22.78 | 509 | 0.10 |
| 41 | 27.07 | 35.08 | 22.77 | 30 | 27.07 | 35.08 | 22.78 | 509 | 0.15 |
| 77 | 27.07 | 35.07 | 22.77 | 50 | 27.07 | 35.07 | 22.77 | 509 | 0.26 |
| 141 | 26.76 | 35.11 | 22.90 | 75 | 27.07 | 35.07 | 22.77 | 509 | 0.38 |
| 190 | 12.59 | 34.58 | 26.17 | 100 | 26.98 | 35.09 | 22.82 | 536 | 0.51 |
| 240 | 10.39 | 34.69 | 26.66 | 150 | 20.10 | 34.83 | 24.63 | 332 | 0.72 |
| 295 | 10.06 | 34.69 | 26.72 | 200 | 11.62 | 34.62 | 26.38 | 165 | 0.85 |
| 350 | 9.43 | 34.67 | 26.81 | 250 | 10.28 | 34.69 | 26.68 | 137 | 0.93 |
| 475 | 8.53a) | 34.61 | 26.91a) | 300 | 9.97 | 34.69 | 26.73 | 132 | 1.00 |
| 607 | 6.86 | 34.54 | 27.10 | 400 | 9.18 | 34.66 | 26.84 | 122 | 1.14 |
| 758 | 5.62 | 34.51 | 27.23 | 500 | 8.14 | 34.58 | 26.94 | 112 | 1.26 |
| | | | | 600 | 6.96 | 34.54 | 27.08 | 99 | 1.38 |
| | | | | 700 | 6.07 | 34.52 | 27.19 | 89 | 1.48 |
| | | | | 800 | (5.40) | (34.52) | (27.27) | (81) | (1.58) |
| | | | | 1000 | (4.58) | (34.52) | (27.36) | (72) | (1.75) |

HUGH M. SMITH; January 30, 1952; 0655, 0729 GCT; 1°54'N, 155°03'W; wind, 050°, 18 kt; weather, intermittent slight drizzle; sea, rough; wire angle, 58°, 40°. 7

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.40 | 35.11 | 22.71 | 0 | 27.40 | 35.11 | 22.69 | 517 | 0.00 |
| 13 | 27.42 | 35.10 | 22.68 | 10 | 27.41 | 35.11 | 22.69 | 517 | 0.05 |
| 29 | 27.38 | 35.08 | 22.68 | 20 | 27.40 | 35.09 | 22.68 | 518 | 0.10 |
| 59 | 27.32 | 35.11 | 22.72 | 30 | 27.38 | 35.08 | 22.68 | 518 | 0.16 |
| | | | | 50 | 27.34 | 35.11 | 22.71 | 515 | 0.26 |
| 117 | 25.00 | 35.07 | 23.41 | 75 | 27.30 | 35.11 | 22.73 | 514 | 0.39 |
| 231 | 11.40 | 34.80 | 26.56 | 100 | 27.22 | 35.11 | 22.75 | 511 | 0.52 |
| 341 | 10.81 | 34.70 | 26.60 | 150 | 16.62 | 34.80 | 25.47 | 252 | 0.71 |
| 463 | 9.32 | 34.68 | 26.84 | 200 | 11.76 | 34.83 | 26.52 | 152 | 0.82 |
| 575 | 8.08 | 34.61 | 26.98 | 250 | 11.37 | 34.80 | 26.57 | 148 | 0.89 |
| 696 | 6.58 | 34.52 | 27.12 | 300 | 11.13 | 34.75 | 26.58 | 147 | 0.97 |
| 938 | 4.83b) | 34.51 | 27.33 | 400 | 10.10 | 34.68 | 26.70 | 135 | 1.12 |
| 1209c) | 3.74 | 34.54 | 27.47 | 500 | 8.96 | 34.66 | 26.88 | 118 | 1.26 |
| | | | | 600 | 7.71 | 34.58 | 27.01 | 106 | 1.38 |
| | | | | 700 | 6.50 | 34.52 | 27.13 | 94 | 1.49 |
| | | | | 800 | 5.64 | 34.51 | 27.23 | 85 | 1.59 |
| | | | | 1000 | 4.58 | 34.52 | 27.36 | 72 | 1.77 |

HUGH M. SMITH; January 30, 1952; 1638, 1726 GCT; 0°54'N, 155°11'W; wind, 020°, 13 kt; weather, partly cloudy; sea, moderate; wire angle, 50°, 55°. 8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0 | 27.25 | 35.06 | 22.70 | 0 | 27.25 | 35.06 | 22.70 | 516 |
| 10 | 27.26 | 35.03 | 22.68 | 10 | 27.26 | 35.03 | 22.68 | 518 |
| 21 | 27.24 | 35.04 | 22.69 | 20 | 27.24 | 35.04 | 22.69 | 517 |
| | | | | 30 | 27.23 | 35.05 | 22.70 | 516 |
| 42 | 27.22 | 35.06 | 22.71 | 50 | 27.20 | 35.06 | 22.72 | 514 |
| 74 | 27.04 | 35.06 | 22.77 | 75 | 27.04 | 35.06 | 22.77 | 509 |
| 139 | 19.00 | 34.82 | 24.90 | 100 | 26.17 | 35.18 | 23.14 | 474 |
| 202 | 12.72 | 34.88 | 26.37 | 150 | 16.80 | 34.96 | 25.55 | 244 |
| 267 | 11.66 | 34.84 | 26.54 | 200 | 12.83 | 34.88 | 26.35 | 168 |
| 338d) | 10.43 | 34.74 | 26.69 | 250 | 11.88 | 34.85 | 26.52 | 153 |
| | | | | 300 | 11.07 | 34.79 | 26.62 | 143 |
| | | | | 400 | (9.48) | (34.67) | (26.80) | (126) |

a) Duplicate values: temperature, 8.60°C; sigma-t, 26.89 g/L.
b) Duplicate value, 4.85°C.
c) One deeper Nansen bottle pretripped but was not recast.
d) Temperature and depths uncertain below this depth; Nansen bottles malfunctioned because of large wire angle.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 9 | HUGH M. SMITH; January 31, 1952; 0421 GCT; 0°06'S, 155°14'W; wind, 060°, 8 kt; weather, partly cloudy; sea, smooth; wire angle, 48°. | | | | | | | | | |
| 2 | 27.31 | 35.04 | | 22.67 | 0 | (27.31) | (35.04) | (22.67) | (519) | (0.00) |
| 14 | 27.14 | 35.04 | | 22.72 | 10 | 27.20 | 35.04 | 22.71 | 516 | 0.05 |
| 30 | 26.96 | 35.07 | | 22.80 | 20 | 27.05 | 35.05 | 22.76 | 510 | 0.10 |
| 60 | 26.68 | 35.23 | | 23.01 | 30 | 26.96 | 35.07 | 22.81 | 506 | 0.15 |
| 116 | 25.35 | 35.26 | | 23.45 | 50 | 26.79 | 35.18 | 22.94 | 493 | 0.25 |
| 222 | 13.04 | 34.97 | | 26.38 | 75 | 26.50 | 35.25 | 23.09 | 479 | 0.38 |
| 324 | 11.46 | 34.82 | | 26.57 | 100 | 25.89 | 35.26 | 23.28 | 460 | 0.50 |
| 437 | 9.30 | 34.67 | | 26.83 | 150 | 18.60 | 35.08 | 25.20 | 278 | 0.68 |
| 543 | 7.51 | 34.60 | | 27.05 | 200 | 13.43 | 35.00 | 26.32 | 171 | 0.80 |
| 659 | 6.31 | 34.54 | | 27.17 | 250 | 12.60 | 34.93 | 26.44 | 160 | 0.88 |
| 894 | 4.94a) | 34.55 | | 27.35a) | 300 | 11.83 | 34.86 | 26.53 | 151 | 0.97 |
| 1145b) | 3.83 | 34.56 | | 27.47 | 400 | 10.00 | 34.71 | 26.74 | 131 | 1.12 |
| | | | | | 500 | 8.20 | 34.62 | 26.97 | 110 | 1.24 |
| | | | | | 600 | 6.85 | 34.56 | 27.11 | 96 | 1.36 |
| | | | | | 700 | 6.00 | 34.54 | 27.21 | 87 | 1.46 |
| | | | | | 800 | 5.39 | 34.55 | 27.30 | 79 | 1.55 |
| | | | | | 1000 | 4.43 | 34.55 | 27.40 | 68 | 1.72 |
| 10 | HUGH M. SMITH; January 31, 1952; 1405 GCT; 1°10'S, 155°08'W; wind, 030°, 6 kt; weather, partly cloudy; sea, smooth; wire angle, 25°. | | | | | | | | | |
| 0 | 26.87 | 35.31 | | 23.02 | 0 | 26.87 | 35.31 | 23.02 | 486 | 0.00 |
| 14 | 26.72 | 35.29 | | 23.05 | 10 | 26.77 | 35.29 | 23.03 | 484 | 0.05 |
| 32 | 26.64 | 35.31 | | 23.09 | 20 | 26.70 | 35.29 | 23.05 | 482 | 0.10 |
| 66 | 26.56 | 35.32 | | 23.12 | 30 | 26.65 | 35.30 | 23.08 | 480 | 0.14 |
| 129 | 25.55 | 35.47 | | 23.55 | 50 | 26.60 | 35.32 | 23.11 | 477 | 0.24 |
| 252 | 11.72 | 34.85 | | 26.54 | 75 | 26.52 | 35.33 | 23.14 | 474 | 0.36 |
| 371 | 10.80 | 34.79 | | 26.67 | 100 | 26.13 | 35.41 | 23.32 | 457 | 0.48 |
| 498 | 7.94 | 34.61 | | 27.00 | 150 | 21.70 | 35.39 | 24.62 | 333 | 0.68 |
| 620 | 6.69 | 34.54 | | 27.12 | 200 | 13.88 | 35.02 | 26.24 | 178 | 0.81 |
| 749 | 5.93 | 34.52 | | 27.20 | 250 | 11.83 | 34.86 | 26.53 | 156 | 0.90 |
| 1015 | 4.40c) | 34.53 | | 27.39 | 300 | 11.41 | 34.83 | 26.58 | 146 | 0.97 |
| 1293 | 3.44 | 34.60 | | 27.54 | 400 | 10.12 | 34.75 | 26.76 | 130 | 1.12 |
| 1585 | 3.02 | 34.59 | | 27.58 | 500 | 7.88 | 34.61 | 27.01 | 106 | 1.25 |
| | | | | | 600 | 6.83 | 34.55 | 27.11 | 96 | 1.36 |
| | | | | | 700 | 6.18 | 34.52 | 27.17 | 90 | 1.46 |
| | | | | | 800 | 5.62 | 34.52 | 27.24 | 84 | 1.56 |
| | | | | | 1000 | 4.48 | 34.53 | 27.38 | 70 | 1.74 |
| 11 | HUGH M. SMITH; January 31, 1952; 2124 GCT; 2°00'S, 155°03'W; wind, 020°, 11 kt; weather, partly cloudy; sea, smooth; wire angle, 35°. | | | | | | | | | |
| 0 | 27.10 | 35.27 | | 22.91 | 0 | 27.10 | 35.27 | 22.91 | 496 | 0.00 |
| 8 | 26.87 | 35.26 | | 22.98 | 10 | 26.93 | 35.26 | 22.96 | 492 | 0.05 |
| 25 | 26.68 | 35.26 | | 23.04 | 20 | 26.74 | 35.26 | 23.02 | 486 | 0.10 |
| 49 | 26.72 | 35.29 | | 23.05 | 30 | 26.68 | 35.28 | 23.05 | 482 | 0.15 |
| 95 | 26.66 | 35.34 | | 23.10 | 50 | 26.73 | 35.30 | 23.05 | 482 | 0.24 |
| 191 | 14.17 | 35.12 | | 26.26 | 75 | 26.71 | 35.33 | 23.08 | 480 | 0.36 |
| 286 | 11.51 | 34.83 | | 26.57 | 100 | 26.62 | 35.36 | 23.13 | 475 | 0.48 |
| 379 | 10.76 | 34.79 | | 26.67 | 150 | 22.35 | 35.46 | 24.49 | 346 | 0.69 |
| 476 | 8.93 | 34.69 | | 26.91 | 200 | 13.38 | 35.05 | 26.37 | 166 | 0.82 |
| 571 | 7.73 | 34.61 | | 27.03 | 250 | 11.89 | 34.87 | 26.53 | 151 | 0.91 |
| 771 | 5.61d) | 34.52 | | 27.24 | 300 | 11.42 | 34.83 | 26.58 | 146 | 0.99 |
| 973 | 4.54 | 34.56 | | 27.40 | 400 | 10.39 | 34.76 | 26.72 | 134 | 1.13 |
| 1178 | 3.79 | 34.56 | | 27.47 | 500 | 8.62 | 34.67 | 26.94 | 112 | 1.27 |
| | | | | | 600 | 7.38 | 34.59 | 27.06 | 101 | 1.38 |
| | | | | | 700 | 6.23 | 34.53 | 27.17 | 90 | 1.49 |
| | | | | | 800 | 5.46 | 34.52 | 27.26 | 73 | 1.59 |
| | | | | | 1000 | 4.41 | 34.56 | 27.41 | 68 | 1.76 |

a) Duplicate values: temperature, 4.89°C; sigma-t, 27.36 g/L.
b) One deeper Nansen bottle pretripped but was not recast.
c) Duplicate value, 4.45°C.
d) Duplicate value, 5.65°C.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; February 1, 1952; 0647 GCT; 3°00'S, 154°58'W; wind, 360°, 11 kt; weather, rain; sea, smooth; wire angle, 27°. 12

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.37 | 35.35 | 22.88 | 0 | 27.37 | 35.35 | 22.89 | 498 | |
| 10 | 27.34 | 35.34 | 22.89 | 10 | 27.34 | 35.34 | 22.88 | 498 | |
| 27 | 27.08 | 35.35 | 22.97 | 20 | 27.21 | 35.34 | 22.93 | 494 | |
| 54 | 27.04 | 35.39 | 23.02 | 30 | 27.07 | 35.36 | 22.99 | 488 | |
| 108a) | 27.13 | 35.44 | 23.03 | 50 | 27.07 | 35.38 | 23.00 | 487 | |
| | | | | 75 | 27.07 | 35.40 | 23.02 | 486 | |
| | | | | 100 | 27.12 | 35.44 | 23.03 | 484 | |

HUGH M. SMITH; February 1, 1952; 1548, 1617 GCT; 4°00'S, 155°07'W; wind, 040°, 14 kt; weather, distant precipitation; sea, slight; wire angle, 17°, 20°. 13

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.65 | 35.55 | 22.94 | 0 | 27.65 | 35.55 | 22.94 | 493 | 0.00 |
| 9 | 27.69 | 35.53 | 22.92 | 10 | 27.68 | 35.52 | 22.91 | 496 | 0.05 |
| 28 | 27.64 | 35.52 | 22.92 | 20 | 27.68 | 35.52 | 22.91 | 496 | 0.10 |
| 56 | 27.54 | 35.53 | 22.96 | 30 | 27.63 | 35.52 | 22.93 | 495 | 0.15 |
| | | | | 50 | 27.55 | 35.52 | 22.95 | 492 | 0.25 |
| 112 | 27.60 | 35.56 | 22.96 | 75 | 27.56 | 35.54 | 22.96 | 491 | 0.37 |
| 222 | 18.26 | 35.46 | 25.58 | 100 | 27.58 | 35.55 | 22.96 | 491 | 0.50 |
| 330 | 10.41 | 34.76 | 26.71 | 150 | 26.60 | 35.71 | 23.40 | 449 | 0.73 |
| 434 | 8.74 | 34.65 | 26.91 | 200 | 20.82 | 35.60 | 25.02 | 295 | 0.92 |
| 541 | 7.48 | 34.59 | 27.05 | 250 | 13.42 | 35.04 | 26.36 | 168 | 1.04 |
| 646 | 6.64 | 34.54 | 27.13 | 300 | 11.19 | 34.83 | 26.63 | 105 | 1.12 |
| 861 | 5.18b) | 34.52 | 27.30b) | 400 | 9.22 | 34.68 | 26.85 | 121 | 1.26 |
| 1072 | 4.23 | 34.54 | 27.42 | 500 | 7.87 | 34.62 | 27.02 | 105 | 1.39 |
| 1280 | 3.56 | 34.56 | 27.50 | 600 | 6.92 | 34.56 | 27.11 | 97 | 1.50 |
| | | | | 700 | 6.20 | 34.53 | 27.18 | 90 | 1.60 |
| | | | | 800 | 5.50 | 34.52 | 27.26 | 82 | 1.70 |
| | | | | 1000 | 4.56 | 34.53 | 27.37 | 71 | 1.87 |

HUGH M. SMITH; February 2, 1952; 0441 GCT; 4°58'S, 155°00'W; wind, 060°, 18 kt; weather, cloudy; sea, moderate; wire angle, 32°. 14

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.79 | 35.45 | 22.82 | 0 | 27.79 | 35.45 | 22.82 | 504 | 0.00 |
| 9 | 27.84 | 35.47 | 22.82 | 10 | 27.84 | 35.47 | 22.82 | 505 | 0.05 |
| 26 | 27.72 | 35.43 | 22.83 | 20 | 27.74 | 35.45 | 22.84 | 503 | 0.10 |
| 51 | 27.66 | 35.48 | 22.89 | 30 | 27.70 | 35.44 | 22.84 | 502 | 0.15 |
| 98 | 27.62 | 35.56 | 22.96 | 50 | 27.66 | 35.48 | 22.89 | 498 | 0.25 |
| 191 | 21.10 | 35.88 | 25.15 | 75 | 27.64 | 35.50 | 22.91 | 496 | 0.38 |
| 283 | 11.20 | 34.82c) | 26.63 | 100 | 27.62 | 35.57 | 22.96 | 491 | 0.50 |
| 373 | 9.67 | 34.70 | 26.79 | 150 | 26.25 | 35.98 | 23.71 | 419 | 0.73 |
| 467 | 8.51 | 34.63 | 26.92 | 200 | 18.52 | 35.63 | 25.64 | 308 | 0.90 |
| 560 | 7.56 | 34.58 | 27.03 | 250 | 12.62 | 34.97 | 26.46 | 158 | 1.00 |
| 758 | 5.90d) | 34.51 | 27.20 | 300 | 10.84 | 34.79 | 26.66 | 139 | 1.08 |
| 952 | 4.69 | 34.51 | 27.35 | 400 | 9.32 | 34.68 | 26.83 | 122 | 1.22 |
| 1149 | 3.99 | 34.54 | 27.44 | 500 | 8.14 | 34.61 | 26.97 | 110 | 1.34 |
| | | | | 600 | 7.17 | 34.56 | 27.07 | 100 | 1.46 |
| | | | | 700 | 6.34 | 34.52 | 27.15 | 92 | 1.57 |
| | | | | 800 | 5.60 | 34.51 | 27.24 | 84 | 1.66 |
| | | | | 1000 | 4.47 | 34.52 | 27.38 | 71 | 1.84 |

a) Additional deeper cast pretripped.
b) Duplicate values: temperature, 5.22°C; sigma-t, 27.29 g/L.
c) This sample may have been accidentally contaminated, but value appears to be good.
d) Duplicate value, 5.95°C.

HBL

HMS-14

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **15** | HUGH M. SMITH; February 2, 1952; 1411 GCT; 5°54'S, 155°03'W; wind, 060°, 18 kt; weather, partly cloudy; sea, moderate; wire angle, 32°. | | | | | | | | | |
| 0 | 27.79 | 35.52 | | 22.87 | 0 | 27.79 | 35.52 | 22.87 | 499 | 0.00 |
| 9 | 27.82 | 35.54 | | 22.88 | 10 | 27.80 | 35.54 | 22.89 | 498 | 0.05 |
| 26 | 27.78 | 35.54 | | 22.89 | 20 | 27.80 | 35.54 | 22.89 | 498 | 0.10 |
| 51 | 27.81 | 35.55 | | 22.89 | 30 | 27.79 | 35.54 | 22.89 | 498 | 0.15 |
| 102 | 28.07 | 35.76 | | 22.96 | 50 | 27.81 | 35.55 | 22.89 | 498 | 0.25 |
| 204 | 21.94 | 36.09 | | 25.08 | 75 | 28.13 | 35.65 | 22.86 | 501 | 0.38 |
| 305 | 11.46 | 34.83 | | 26.58 | 100 | 28.06 | 35.76 | 22.97 | 490 | 0.50 |
| 404 | 8.88 | 34.67 | | 26.89 | 150 | 27.22 | 36.02 | 23.43 | 446 | 0.74 |
| 507 | 7.84 | 34.58 | | 26.99 | 200 | 22.32 | 36.10 | 24.98 | 299 | 0.93 |
| 608 | 7.04 | 34.54 | | 27.07 | 250 | 15.18 | 35.30 | 26.18 | 184 | 1.05 |
| 822 | 5.45 | 34.52 | | 27.26 | 300 | 11.64 | 34.86 | 26.56 | 148 | 1.14 |
| 1033 | 4.30 | 34.54 | | 27.41 | 400 | 8.93 | 34.68 | 26.90 | 116 | 1.28 |
| 1240 | 3.66 | 34.58 | | 27.51 | 500 | 7.94 | 34.58 | 26.97 | 109 | 1.40 |
| | | | | | 600 | 7.10 | 34.54 | 27.06 | 101 | 1.52 |
| | | | | | 700 | 6.33 | 34.52 | 27.15 | 92 | 1.62 |
| | | | | | 800 | 5.60 | 34.52 | 27.24 | 84 | 1.72 |
| | | | | | 1000 | 4.48 | 34.54 | 27.39 | 70 | 1.90 |
| **16** | HUGH M. SMITH; February 2, 1952; 2322 GCT; 6°50'S, 155°05'W; wind, 020°, 13 kt; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | |
| 0 | 28.49 | 35.75 | | 22.82 | 0 | 28.49 | 35.75 | 22.82 | 505 | 0.00 |
| 10 | 28.48 | 35.76 | | 22.83 | 10 | 28.48 | 35.76 | 22.83 | 504 | 0.05 |
| 30 | 28.40 | 35.76 | | 22.86 | 20 | 28.44 | 35.76 | 22.84 | 503 | 0.10 |
| 59 | 28.35 | 35.76 | | 22.87 | 30 | 28.40 | 35.76 | 22.86 | 501 | 0.15 |
| 118 | 28.18 | 35.76 | | 22.93 | 50 | 28.38 | 35.76 | 22.86 | 501 | 0.25 |
| 233 | 19.69 | 35.92 | | 25.56 | 75 | 28.30 | 35.76 | 22.89 | 498 | 0.38 |
| 347 | 9.94 | 34.72 | | 26.76 | 100 | 28.28 | 35.76 | 22.90 | 496 | 0.50 |
| 458 | 8.22 | 34.61 | | 26.95 | 150 | 27.18 | 36.03 | 23.46 | 444 | 0.74 |
| 573 | 6.82 | 34.53 | | 27.09 | 200 | 23.00 | 36.13 | 24.81 | 315 | 0.94 |
| 682 | 6.02 | 34.52 | | 27.19 | 250 | 17.44 | 35.62 | 25.90 | 211 | 1.07 |
| 910 | 4.81 | 34.52 | | 27.34 | 300 | 12.42 | 34.95 | 26.49 | 155 | 1.17 |
| 1132 | 4.10 | 34.54 | | 27.43 | 400 | 9.06 | 34.66 | 26.86 | 120 | 1.31 |
| 1344 | 3.54 | 34.54 | | 27.49 | 500 | 7.68 | 34.57 | 27.00 | 106 | 1.44 |
| | | | | | 600 | 6.63 | 34.53 | 27.12 | 95 | 1.55 |
| | | | | | 700 | 5.87 | 34.52 | 27.21 | 87 | 1.65 |
| | | | | | 800 | 5.25 | 34.52 | 27.29 | 80 | 1.74 |
| | | | | | 1000 | 4.50 | 34.53 | 27.38 | 71 | 1.91 |
| **17** | HUGH M. SMITH; February 15, 1952; 1236 GCT; 7°56'S, 179°53'W; wind, 040°, 8 kt; weather, partly cloudy; sea, slight; wire angle, 13°. | | | | | | | | | |
| 0 | 29.58 | 34.90 | 0.35 | 21.81 | 0 | 29.58 | 34.90 | 21.82 | 601 | 0.00 |
| 9 | 29.60 | 34.89 | 0.44 | 21.80 | 10 | 29.60 | 34.89 | 21.80 | 602 | 0.06 |
| 23 | 29.42 | 34.90 | 0.46 | 21.87 | 20 | 29.50 | 34.90 | 21.84 | 598 | 0.12 |
| 52 | 29.36 | 35.15 | 0.45 | 22.08 | 30 | 29.41 | 34.94 | 21.90 | 592 | 0.18 |
| 104 | 28.36 | 35.60 | 0.69 | 22.75 | 50 | 29.37 | 35.13 | 22.06 | 577 | 0.30 |
| 207 | 22.86 | 36.07 | 0.94 | 24.80 | 75 | 29.18 | 35.29 | 22.24 | 560 | 0.44 |
| 311 | 13.54 | 34.97 | 1.76 | 26.28 | 100 | 28.49 | 35.55 | 22.67 | 519 | 0.58 |
| 420 | 9.23 | 34.68 | 2.26 | 26.85 | 150 | 26.20 | 35.96 | 23.71 | 419 | 0.81 |
| 525 | 7.52 | 34.56 | 2.41 | 27.02 | 200 | 23.42 | 36.09 | 24.66 | 330 | 1.01 |
| 630 | 6.54 | 34.52 | 2.47 | 27.13 | 250 | 18.59 | 35.67 | 25.65 | 235 | 1.15 |
| 835 | 5.11a) | 34.50 | 2.72 | 27.29a) | 300 | 14.40 | 35.09 | 26.19 | 184 | 1.26 |
| 1044 | 4.28 | 34.53 | 2.81 | 27.40 | 400 | 9.72 | 34.71 | 26.79 | 123 | 1.43 |
| 1245 | 3.72 | 34.53 | 2.66 | 27.46 | 500 | 7.84 | 34.58 | 26.99 | 108 | 1.55 |
| | | | | | 600 | 6.79 | 34.52 | 27.09 | 98 | 1.66 |
| | | | | | 700 | 6.00 | 34.51 | 27.19 | 89 | 1.77 |
| | | | | | 800 | 5.32 | 34.50 | 27.26 | 82 | 1.86 |
| | | | | | 1000 | 4.45 | 34.52 | 27.38 | 78 | 2.04 |

a) Duplicate values: temperature, 5.15°C; sigma-t, 27.28 g/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; February 15, 1952; 2219 GCT; 7°01'S, 179°49'W; wind, 050°, 12 kt; weather, partly cloudy; sea, slight; wire angle, 17°. 18

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.32 | 34.91 | 0.38 | 21.91 | 0 | 29.32 | 34.91 | 21.91 | 592 | 0.00 |
| 10 | 29.28 | 34.90 | 0.39 | 21.91 | 10 | 29.28 | 34.90 | 21.92 | 591 | 0.06 |
| 24 | 29.24 | 34.94 | 0.40 | 21.96 | 20 | 29.26 | 34.92 | 21.94 | 589 | 0.12 |
| 52 | 29.42 | 35.10 | 0.44 | 22.02 | 30 | 29.23 | 34.97 | 21.99 | 584 | 0.18 |
| 102 | 28.99 | 35.51 | 0.66 | 22.47 | 50 | 29.40 | 35.08 | 22.01 | 582 | 0.29 |
| 205 | 23.96 | 36.19 | 0.86 | 24.58 | 75 | 29.25 | 35.33 | 22.25 | 559 | 0.44 |
| 308 | 14.12 | 35.06 | 1.74 | 26.23 | 100 | 29.00 | 35.49 | 22.45 | 540 | 0.58 |
| 416 | 9.10 | 34.66 | 2.25 | 26.86 | 150 | 28.08 | 35.77 | 22.97 | 490 | 0.84 |
| 519 | 7.45 | 34.57 | 2.40 | 27.04 | 200 | 24.45 | 36.19 | 24.42 | 352 | 1.05 |
| 823 | 5.19a) | 34.50 | 2.68 | 27.28a) | 250 | 18.80 | 35.72 | 25.64 | 308 | 1.20 |
| 621 | 6.43 | 34.51 | 2.47 | 27.13 | 300 | 14.80 | 35.15 | 26.15 | 235 | 1.32 |
| 1026 | 4.26 | 34.52 | 2.80 | 27.40 | 400 | 9.55 | 34.69 | 26.80 | 125 | 1.48 |
| 1223 | 3.70 | 34.55 | 2.82 | 27.48 | 500 | 7.67 | 34.58 | 27.01 | 106 | 1.60 |
| | | | | | 600 | 6.63 | 34.52 | 27.11 | 96 | 1.72 |
| | | | | | 700 | 5.90 | 34.51 | 27.20 | 88 | 1.82 |
| | | | | | 800 | 5.32 | 34.51 | 27.27 | 81 | 1.91 |
| | | | | | 1000 | 4.39 | 34.52 | 27.39 | 70 | 2.08 |

HUGH M. SMITH; February 16, 1952; 0727 GCT; 6°04'S, 179°59'W; wind, 050°, 17 kt; weather, partly cloudy; sea, moderate; wire angle, 28°. 19

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.37 | 35.47 | 0.47 | 22.31 | 0 | 29.37 | 35.47 | 22.31 | 553 | 0.00 |
| 8 | 29.40 | 35.44 | 0.49 | 22.28 | 10 | 29.40 | 35.44 | 22.28 | 556 | 0.06 |
| 26 | 29.34 | 35.45 | 0.52 | 22.31 | 20 | 29.39 | 35.44 | 22.29 | 556 | 0.11 |
| 50 | 29.12 | 35.46 | 0.65 | 22.39 | 30 | 29.28 | 35.45 | 22.33 | 552 | 0.17 |
| 101 | 28.81 | 35.58 | 0.67 | 22.58 | 50 | 29.12 | 35.46 | 22.39 | 546 | 0.28 |
| 198 | 23.88 | 36.25 | 0.86 | 24.65 | 75 | 29.00 | 35.50 | 22.46 | 539 | 0.41 |
| 297 | 14.15 | 35.11 | 1.76 | 26.26 | 100 | 28.82 | 35.58 | 22.58 | 528 | 0.55 |
| 392 | 10.34 | 34.78 | 2.12 | 26.74 | 150 | 26.91 | 36.02 | 23.53 | 436 | 0.79 |
| 493 | 8.20 | 34.63 | 2.28 | 26.97 | 200 | 23.82 | 36.25 | 24.66 | 329 | 0.99 |
| 592 | 7.16 | 34.57 | 2.37 | 27.08 | 250 | 18.00 | 35.61 | 25.76 | 225 | 1.13 |
| 802 | 5.32b) | 34.52 | 2.63 | 27.28b) | 300 | 14.08 | 35.10 | 26.26 | 176 | 1.24 |
| 1013 | 4.36 | 34.53 | 2.70 | 27.40 | 400 | 10.12 | 34.76 | 26.76 | 129 | 1.40 |
| 1224 | 3.72 | 34.57 | 2.79 | 27.49 | 500 | 8.11 | 34.62 | 26.98 | 109 | 1.53 |
| | | | | | 600 | 7.09 | 34.57 | 27.09 | 98 | 1.64 |
| | | | | | 700 | 6.19 | 34.54 | 27.19 | 89 | 1.74 |
| | | | | | 800 | 5.36 | 34.52 | 27.27 | 81 | 1.84 |
| | | | | | 1000 | 4.39 | 34.53 | 27.39 | 69 | 2.01 |

HUGH M. SMITH; February 16, 1952; 1705 GCT; 5°03'S, 179°59'W; wind, 060°, 14 kt; weather, missing; sea, slight; wire angle, 22°. 20

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.14 | 35.51 | 0.51 | 22.42 | 0 | 29.14 | 35.51 | 22.42 | 543 | 0.00 |
| 9 | 29.18 | 35.47 | 0.51 | 22.38 | 10 | 29.18 | 35.47 | 22.38 | 547 | 0.05 |
| 23 | 29.15 | 35.47 | 0.58 | 22.39 | 20 | 29.16 | 35.47 | 22.38 | 546 | 0.11 |
| 50 | 29.18 | 35.50 | 0.58 | 22.40 | 30 | 29.15 | 35.48 | 22.40 | 545 | 0.16 |
| 99 | 29.03 | 35.60 | 0.61 | 22.52 | 50 | 29.18 | 35.50 | 22.40 | 545 | 0.27 |
| 149 | 28.01 | 35.62 | 0.84 | 22.88 | 75 | 29.11 | 35.55 | 22.46 | 539 | 0.41 |
| 197 | 24.54 | 36.26 | 0.90 | 24.45 | 100 | 29.03 | 35.60 | 22.52 | 533 | 0.54 |
| 246 | 18.00 | 35.52 | 1.35 | 25.69 | 150 | 28.00 | 35.62 | 22.88 | 499 | 0.81 |
| 295 | 12.58 | 34.95 | 1.97 | 26.46 | 200 | 24.45 | 36.26 | 24.48 | 347 | 1.02 |
| 349 | 9.90 | 34.73 | 2.25 | 26.78 | 250 | 17.94 | 35.51 | 25.70 | 231 | 1.17 |
| 398 | 9.10c) | 34.69 | 2.32 | 26.88c) | 300 | 12.00 | 34.90 | 26.53 | 151 | 1.27 |
| 496 | 8.00 | 34.62 | 2.43 | 27.00 | 400 | 9.05 | 34.68 | 26.88 | 118 | 1.41 |
| 597 | 7.12 | 34.57 | 2.56 | 27.09 | 500 | 7.98 | 34.61 | 26.99 | 107 | 1.54 |

a) Duplicate values: temperature, 5.22°C; sigma-t, 27.27 g/L.
b) Duplicate values: temperature, 5.35°C; sigma-t, 27.27 g/L.
c) Duplicate values: temperature, 9.05°C; sigma-t, 26.89 g/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 21 | HUGH M. SMITH; February 17, 1952; 0242 GCT; 3°59'S, 179°59'W; wind, 070°, 16 kt; weather, partly cloudy; sea, moderate; wire angle, 22°. | | | | | | | | | |
| 0 | 28.76 | 35.59 | 0.64 | 22.61 | 0 | 28.76 | 35.59 | 22.61 | 525 | 0.00 |
| 9 | 28.74 | 35.60 | 0.64 | 22.62 | 10 | 28.74 | 35.60 | 22.62 | 524 | 0.05 |
| 29 | 28.59 | 35.59 | 0.64 | 22.66 | 20 | 28.64 | 35.60 | 22.66 | 521 | 0.10 |
| 55 | 28.59 | 35.58 | 0.64 | 22.66 | 30 | 28.59 | 35.59 | 22.67 | 519 | 0.16 |
| 111 | 28.62 | 35.59 | 0.64 | 22.65 | 50 | 28.59 | 35.58 | 22.66 | 520 | 0.26 |
| 164 | 27.59 | 35.67 | 0.82 | 23.05 | 75 | 28.60 | 35.58 | 22.65 | 520 | 0.39 |
| 218 | 21.76 | 36.01 | 1.01 | 25.10 | 100 | 28.62 | 35.59 | 22.66 | 520 | 0.52 |
| 274 | 13.55 | 35.03 | 1.95 | 26.32 | 150 | 28.01 | 35.63 | 22.89 | 498 | 0.78 |
| 328 | 10.35 | 34.78 | 2.23 | 26.74 | 200 | 24.14 | 36.18 | 24.51 | 344 | 1.00 |
| 382 | 9.30 | 34.67 | 2.32 | 26.83 | 250 | 16.38 | 35.33 | 25.93 | 208 | 1.14 |
| 433 | 8.78a) | 34.65 | 2.44 | 26.90a) | 300 | 11.64 | 34.88 | 26.58 | 146 | 1.23 |
| 543 | 7.60 | 34.60 | 2.61 | 27.04 | 400 | 9.10 | 34.65 | 26.85 | 121 | 1.37 |
| 651 | 6.54 | 34.53 | 2.71 | 27.13 | 500 | 8.06 | 34.62 | 26.99 | 108 | 1.50 |
| 22 | HUGH M. SMITH; February 17, 1952; 1212 GCT; 2°56'S, 180°00'W; wind, 050°, 20 kt; weather, missing; sea, moderate; wire angle, 37°. | | | | | | | | | |
| 0 | 28.17 | 35.55 | b) | 22.77 | 0 | 28.17 | 35.55 | 22.77 | 509 | 0.00 |
| 9 | 28.20 | 35.55 | | 22.76 | 10 | 28.20 | 35.55 | 22.76 | 510 | 0.05 |
| 25 | 28.17 | 35.53 | | 22.76 | 20 | 28.19 | 35.54 | 22.76 | 510 | 0.10 |
| 48 | 28.16 | 35.56 | | 22.78 | 30 | 28.18 | 35.53 | 22.76 | 511 | 0.15 |
| 92 | 28.20 | 35.57 | | 22.78 | 50 | 28.16 | 35.56 | 22.78 | 508 | 0.26 |
| 132 | 27.90 | 35.56 | | 22.87 | 75 | 28.19 | 35.57 | 22.78 | 508 | 0.38 |
| 171 | 25.71 | 35.74 | | 23.70 | 100 | 28.20 | 35.57 | 22.78 | 509 | 0.51 |
| 206 | 18.04 | 35.52 | | 25.68 | 150 | 27.25 | 35.62 | 23.13 | 475 | 0.76 |
| 241 | 12.82 | 34.98 | | 26.43 | 200 | 18.72 | 35.58 | 25.55 | 244 | 0.94 |
| 280 | 11.32 | 34.86 | | 26.63 | 250 | 12.69 | 34.96 | 26.44 | 160 | 1.05 |
| 315 | 10.33c) | 34.76 | | 26.73c) | 300 | 10.66 | 34.80 | 26.70 | 135 | 1.13 |
| 399 | 9.12 | 34.66 | | 26.85 | 400 | 9.11 | 34.66 | 26.85 | 120 | 1.26 |
| 488 | 7.98 | 34.61 | | 26.99 | 500 | (7.93) | (34.61) | (27.00) | (107) | (1.39) |
| 23 | HUGH M. SMITH; February 17, 1952; 2234 GCT; 1°52'S, 179°54'E; wind, 060°, 10 kt; weather, partly cloudy; sea, slight; wire angle, 43°. | | | | | | | | | |
| 0 | 28.00 | 35.53 | 0.68 | 22.81 | 0 | 28.00 | 35.53 | 22.81 | 505 | 0.00 |
| 11 | 27.92 | 35.54 | 0.68 | 22.85 | 10 | 27.92 | 35.54 | 22.85 | 502 | 0.05 |
| 24 | 27.88 | 35.53 | 0.70 | 22.85 | 20 | 27.90 | 35.53 | 22.85 | 502 | 0.10 |
| 51 | 27.90 | 35.53 | 0.70 | 22.85 | 30 | 27.88 | 35.53 | 22.85 | 501 | 0.15 |
| 96 | 27.92 | 35.53 | 0.69 | 22.84 | 50 | 27.90 | 35.53 | 22.85 | 502 | 0.25 |
| 135 | 27.92 | 35.57 | 0.71 | 22.87 | 75 | 27.91 | 35.53 | 22.84 | 502 | 0.38 |
| 167 | 25.64 | 35.77 | 0.99 | 23.74 | 100 | 27.92 | 35.53 | 22.84 | 503 | 0.50 |
| 195 | 16.90 | 35.36 | 1.59 | 25.83 | 150 | 27.00 | 35.67 | 23.24 | 464 | 0.75 |
| 228 | 13.64 | 35.04 | 1.76 | 26.31 | 200 | 16.36 | 35.31 | 25.92 | 209 | 0.92 |
| 265 | 11.41 | 34.83 | 1.89 | 26.58 | 250 | 12.02 | 34.89 | 25.98 | 152 | 1.02 |
| 298 | 10.62d) | 34.77 | 2.25 | 26.68 | 300 | 10.62 | 34.76 | 26.67 | 138 | 1.09 |
| 370 | 9.85 | 34.75 | 2.41 | 26.80 | 400 | 9.60 | 34.74 | 26.83 | 122 | 1.23 |
| 469 | 9.04 | 34.69 | 2.55 | 26.89 | 500 | (8.80) | (34.68) | (26.92) | (114) | (1.36) |

a) Duplicate values: temperature, 8.82°C; sigma-t, 26.89 g/L.
b) Phosphate analyses faulty.
c) Duplicate values: temperature, 10.36°C; sigma-t, 26.73 g/L.
d) Duplicate value, 10.66°C.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; February 18, 1952; 0702 GCT; 0°59'S, 179°57'E; wind, 070°, 13 kt; weather, partly cloudy; sea, slight; wire angle, 35°. 24

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 27.74 | 35.44 | 0.84 | 22.83 | 0 | (27.74) | (35.44) | (22.83) | (504) | (0.00) |
| 17 | 27.62 | 35.44 | 0.92 | 22.87 | 10 | 27.69 | 35.44 | 22.85 | 502 | 0.05 |
| 34 | 27.56 | 35.44 | 0.88 | 22.89 | 20 | 27.62 | 35.44 | 22.87 | 500 | 0.10 |
| 69 | 27.56 | 35.44 | 0.96 | 22.89 | 30 | 27.59 | 35.44 | 22.80 | 499 | 0.15 |
| 134 | 25.93 | 35.57 | 1.15 | 23.50 | 50 | 27.56 | 35.44 | 22.89 | 498 | 0.25 |
| 197 | 16.53 | 35.12 | 1.57 | 25.73 | 75 | 27.56 | 35.44 | 22.89 | 498 | 0.38 |
| 261 | 11.74 | 34.86 | 2.13 | 26.55 | 100 | 27.42 | 35.45 | 22.91 | 493 | 0.50 |
| 321 | 10.92 | 34.77 | 2.50 | 26.63 | 150 | 23.55 | 35.60 | 24.25 | 368 | 0.72 |
| 386 | 10.25 | 34.75 | 2.61 | 26.73 | 200 | 16.50 | 35.12 | 25.74 | 226 | 0.87 |
| 455 | 9.31 | 34.70 | 2.74 | 26.85 | 250 | 12.68 | 34.92 | 26.41 | 162 | 0.97 |
| 520 | 8.42a) | 34.65 | 2.85 | 26.95 | 300 | 11.14 | 34.79 | 26.60 | 144 | 1.05 |
| 647 | 6.44 | 34.56 | 3.12 | 27.17 | 400 | 10.10 | 34.74 | 26.75 | 130 | 1.20 |
| 787 | 5.24 | 34.55 | 3.13 | 27.31 | 500 | 8.73 | 34.67 | 26.92 | 114 | 1.33 |

HUGH M. SMITH; February 18, 1952; 1648 GCT; 0°02'N, 179°59'E; wind, 060°, 9 kt; weather, missing; sea, slight; wire angle, 27°. 25

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 27.45 | 35.49 | 0.92 | 22.96 | 0 | (27.45) | (35.49) | (22.96) | (491) | (0.00) |
| 20 | 27.48 | 35.50 | 0.95 | 22.96 | 10 | 27.46 | 35.49 | 22.96 | 491 | 0.05 |
| 39 | 27.39 | 35.48 | 0.96 | 22.97 | 20 | 27.48 | 35.50 | 22.96 | 491 | 0.10 |
| 76 | 27.16 | 35.48 | 0.99 | 23.05 | 30 | 27.43 | 35.49 | 22.97 | 490 | 0.15 |
| 146 | 22.26 | 35.25 | 1.21 | 24.35 | 50 | 27.33 | 35.48 | 22.99 | 488 | 0.25 |
| 217 | 15.87 | 35.13 | 1.56 | 25.90 | 75 | 27.16 | 35.48 | 23.05 | 483 | 0.37 |
| 289 | 11.70 | 34.85 | 2.30 | 26.55 | 100 | 26.62 | 35.44 | 23.19 | 469 | 0.49 |
| 355 | 10.88 | 34.79 | 2.62 | 26.65 | 150 | 21.00 | 35.24 | 24.69 | 326 | 0.69 |
| 426 | 9.80 | 34.72 | 2.88 | 26.79 | 200 | 18.20 | 35.21 | 25.40 | 258 | 0.84 |
| 503 | 8.52 | 34.67 | 3.05 | 26.95 | 250 | 14.33 | 35.03 | 26.16 | 187 | 0.96 |
| 576 | 7.39b) | 34.61 | 3.17 | 27.08b) | 300 | 11.61 | 34.84 | 26.55 | 149 | 1.04 |
| 715 | 5.88 | 34.54 | 3.16 | 27.23 | 400 | 10.22 | 34.74 | 26.73 | 132 | 1.19 |
| 866 | 4.82 | 34.53 | 3.24 | 27.35 | 500 | 8.60 | 34.68 | 26.95 | 112 | 1.32 |

HUGH M. SMITH; February 19, 1952; 0346 GCT; 1°03'N, 179°58'W; wind, 090°, 13 kt; weather, cloudy; sea, slight; wire angle, 49°. 26

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 28.03 | 35.49 | 0.91 | 22.77 | 0 | (28.03) | (35.49) | (22.77) | (509) | (0.00) |
| 15 | 27.58 | 35.47 | 0.93 | 22.91 | 10 | 27.80 | 35.48 | 22.84 | 503 | 0.05 |
| 26 | 27.50 | 35.47 | 0.94 | 22.93 | 20 | 27.53 | 35.47 | 22.92 | 495 | 0.10 |
| 49 | 27.50 | 35.48 | 0.94 | 22.94 | 30 | 27.49 | 35.47 | 22.93 | 494 | 0.15 |
| 88 | 27.48 | 35.46 | 0.91 | 22.93 | 50 | 27.50 | 35.48 | 22.94 | 493 | 0.25 |
| 121 | 27.36 | 35.42 | 0.93 | 22.94 | 75 | 27.49 | 35.47 | 22.93 | 494 | 0.37 |
| 148 | 26.63 | 35.27 | 0.96 | 23.06 | 100 | 27.46 | 35.44 | 22.92 | 495 | 0.50 |
| 172 | 19.37 | 34.88 | 1.24 | 24.85 | 150 | 26.58 | 35.27 | 23.07 | 480 | 0.74 |
| 200 | 16.22 | 35.08 | 1.51 | 25.78 | 200 | 16.22 | 35.08 | 25.78 | 223 | 0.92 |
| 233 | 12.52 | 34.69 | 1.75 | 26.27 | 250 | 11.80 | 34.77 | 26.47 | 157 | 1.05 |
| 266 | 11.46 | 34.80 | 2.18 | 26.55 | 300 | 11.02 | 34.79 | 26.63 | 142 | 1.13 |
| 333 | 10.66 | 34.76 | 2.50 | 26.67 | 400 | 9.76 | 34.71 | 26.78 | 127 | 1.27 |
| 430 | 9.36 | 34.69 | 2.71 | 26.84 | 500 | (8.65) | (34.66) | (26.92) | (114) | (1.40) |

a) Duplicate value, 8.45°C.
b) Duplicate values: temperature, 7.43°C; sigma-t, 27.07 g/L.

| | OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| | m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 27 | HUGH M. SMITH; February 19, 1952; 1336 GCT; 2°07'N, 179°57'W; wind, 070°, 14 kt; weather, missing; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| | 4 | 27.85 | 35.34 | 0.82 | 22.72 | 0 | (27.85) | (35.34) | (22.72) | (514) | (0.00) |
| | 18 | 27.86 | 35.35 | 0.85 | 22.72 | 10 | 27.85 | 35.34 | 22.72 | 514 | 0.05 |
| | 36 | 27.74 | 35.34 | 0.87 | 22.76 | 20 | 27.86 | 35.35 | 22.72 | 514 | 0.10 |
| | 74 | 27.68 | 35.36 | 0.88 | 22.79 | 30 | 27.76 | 35.34 | 22.75 | 511 | 0.15 |
| | 144 | 26.78 | 35.22 | 1.03 | 22.98 | 50 | 27.70 | 35.35 | 22.77 | 509 | 0.26 |
| | 214 | 11.72 | 34.63 | 2.09 | 26.37 | 75 | 27.68 | 35.36 | 22.79 | 507 | 0.38 |
| | 283 | 10.96 | 34.79 | 2.45 | 26.64 | 100 | 27.60 | 35.33 | 22.79 | 507 | 0.51 |
| | 348 | 10.30 | 34.75 | 2.58 | 26.73 | 150 | 25.70 | 35.15 | 23.26 | 463 | 0.76 |
| | 418 | 9.72 | 34.73 | 2.74 | 26.81 | 200 | 14.52 | 34.72 | 25.88 | 213 | 0.93 |
| | 493 | 8.90 | 34.66 | 2.83 | 26.89 | 250 | 11.34 | 34.80 | 26.57 | 147 | 1.02 |
| | 564 | 8.14a) | 34.61 | 2.84 | 26.97 | 300 | 10.79 | 34.79 | 26.67 | 138 | 1.10 |
| | 703 | 6.14 | 34.53 | 3.26 | 27.19 | 400 | 9.96 | 34.73 | 26.77 | 129 | 1.24 |
| | 855 | 4.92 | 34.53 | 3.28 | 27.33 | 500 | 8.84 | 34.65 | 26.89 | 117 | 1.37 |
| 28 | HUGH M. SMITH; February 19, 1952; 2237 GCT; 3°06'N, 179°57'W; wind, 100°, 7 kt; weather, cloudy; sea, slight; wire angle, 32°. | | | | | | | | | | |
| | 0 | 28.11 | 35.22 | 0.78 | 22.54 | 0 | 28.11 | 35.22 | 22.54 | 531 | 0.00 |
| | 13 | 28.03 | 35.23 | 0.81 | 22.58 | 10 | 28.05 | 35.23 | 22.57 | 528 | 0.05 |
| | 30 | 28.00 | 35.27 | 0.86 | 22.62 | 20 | 28.02 | 35.25 | 22.60 | 526 | 0.11 |
| | 63 | 28.02 | 35.31 | 0.91 | 22.64 | 30 | 28.00 | 35.27 | 22.62 | 524 | 0.16 |
| | 122 | 27.94 | 35.29 | 0.91 | 22.65 | 50 | 28.00 | 35.29 | 22.63 | 522 | 0.26 |
| | 176 | 22.86 | 35.00 | 0.96 | 23.99 | 75 | 28.00 | 35.31 | 22.65 | 521 | 0.39 |
| | 231 | 12.43 | 34.55 | 2.16 | 26.17 | 100 | 27.99 | 35.30 | 22.65 | 521 | 0.53 |
| | 284 | 9.96 | 34.64 | 2.74 | 26.70 | 150 | 25.92 | 35.18 | 23.21 | 467 | 0.78 |
| | 343 | 9.12 | 34.68 | 2.80 | 26.87 | 200 | 18.27 | 34.78 | 25.06 | 291 | 0.97 |
| | 409 | 8.48 | 34.63 | 2.77 | 26.93 | 250 | 11.20 | 34.58 | 26.43 | 161 | 1.09 |
| | 474 | 7.93b) | 34.61 | 2.86 | 27.00b) | 300 | 9.70 | 34.66 | 26.76 | 130 | 1.16 |
| | 607 | 6.96 | 34.56 | 3.10 | 27.10 | 400 | 8.59 | 34.64 | 26.92 | 114 | 1.29 |
| | 756 | 5.60 | 34.55 | 3.33 | 27.27 | 500 | 7.80 | 34.60 | 27.01 | 106 | 1.40 |
| 29 | HUGH M. SMITH; February 20, 1952; 0741 GCT; 4°05'N, 179°55'W; wind, 150°, 11 kt; weather, moderate rain; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| | 0 | 27.98 | 34.89 | 0.80 | 22.34 | 0 | 27.98 | 34.89 | 22.34 | 550 | 0.00 |
| | 10 | 28.09 | 35.23 | 0.80 | 22.56 | 10 | 28.09 | 35.23 | 22.56 | 529 | 0.05 |
| | 29 | 28.01 | 35.25 | 0.81 | 22.60 | 20 | 28.06 | 35.25 | 22.58 | 527 | 0.11 |
| | 59 | 28.00 | 35.25 | 0.80 | 22.60 | 30 | 28.01 | 35.25 | 22.60 | 525 | 0.16 |
| | 115 | 28.00 | 35.25 | 0.80 | 22.60 | 50 | 28.00 | 35.25 | 22.61 | 525 | 0.26 |
| | 173 | 27.35 | 35.17 | 0.90 | 22.75 | 75 | 28.00 | 35.25 | 22.61 | 525 | 0.40 |
| | 230 | 11.81 | 34.55 | 2.23 | 26.29 | 100 | 28.00 | 35.25 | 22.61 | 525 | 0.53 |
| | 289 | 9.26 | 34.61 | 2.65 | 26.79 | 150 | 27.81 | 35.23 | 22.65 | 521 | 0.80 |
| | 343 | 8.66 | 34.61 | 2.59 | 26.89 | 200 | 18.20 | 34.78 | 25.07 | 290 | 1.00 |
| | 400 | 8.12 | 34.60 | 2.74 | 26.96 | 250 | 10.20 | 34.60 | 26.62 | 142 | 1.11 |
| | 452 | 7.68c) | 34.58 | 2.80 | 27.01c) | 300 | 9.13 | 34.61 | 26.81 | 125 | 1.18 |
| | 569 | 6.86 | 34.56 | 3.06 | 27.11 | 400 | 8.12 | 34.60 | 26.96 | 110 | 1.31 |
| | 680 | 6.07 | 34.55 | 3.21 | 27.21 | 500 | 7.38 | 34.57 | 27.05 | 102 | 1.42 |

a) Duplicate value, 8.19°C.
b) Duplicate values: temperature, 7.99°C; sigma-t, 26.99 g/L.
c) Duplicate values: temperature, 7.73°C; sigma-t, 27.00 g/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; February 20, 1952; 1637 GCT; 5°06'N, 179°50'W; wind, 130°, 5 kt; weather, slight drizzle; sea, slight; wire angle, 05°. 30

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.17 | 34.88 | 0.65 | 22.27 | 0 | 28.17 | 34.88 | 22.27 | 557 | 0.00 |
| 10 | 28.22 | 34.89 | 0.61 | 22.26 | 10 | 28.22 | 34.89 | 22.26 | 558 | 0.06 |
| 31 | 28.22 | 34.92 | 0.71 | 22.28 | 20 | 28.22 | 34.90 | 22.27 | 557 | 0.11 |
| 60 | 28.20 | 34.96 | 0.77 | 22.32 | 30 | 28.22 | 34.92 | 22.28 | 556 | 0.17 |
| 120 | 26.96 | 35.22 | 0.99 | 22.92 | 50 | 28.21 | 34.95 | 22.31 | 554 | 0.28 |
| 177 | 19.88 | 34.88 | 1.22 | 24.72 | 75 | 28.20 | 35.00 | 22.35 | 550 | 0.42 |
| 236 | 11.34 | 34.60 | 2.55 | 26.42 | 100 | 28.18 | 35.00 | 22.36 | 549 | 0.56 |
| 293 | 9.68 | 34.64 | 2.82 | 26.74 | 150 | 22.72 | 35.02 | 24.05 | 387 | 0.84 |
| 351 | 8.96 | 34.65 | 2.93 | 26.87 | 200 | 17.61 | 34.77 | 25.21 | 277 | 1.06 |
| 408 | 8.42 | 34.64 | 2.82 | 26.95 | 250 | 10.53 | 34.62 | 26.58 | 146 | 1.17 |
| 461 | 8.07a) | 34.59 | 2.83 | 26.96a) | 300 | 9.60 | 34.64 | 26.76 | 130 | 1.24 |
| 579 | 7.28 | 34.58 | 3.08 | 27.07 | 400 | 8.50 | 34.65 | 26.94 | 112 | 1.37 |
| 691 | 6.42 | 34.53 | 3.14 | 27.15 | 500 | 7.80 | 34.59 | 27.00 | 106 | 1.49 |

HUGH M. SMITH; February 21, 1952; 0141 GCT; 6°06'N, 179°44'W; wind, 130°, 12 kt; weather, moderate rain; sea, moderate; wire angle, 05°. 31

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.07 | 34.69 | 0.63 | 22.16 | 0 | 28.07 | 34.69 | 22.16 | 568 | 0.00 |
| 10 | 28.10 | 34.69 | 0.54 | 22.15 | 10 | 28.10 | 34.69 | 22.15 | 569 | 0.06 |
| 25 | 28.08 | 34.71 | 0.58 | 22.17 | 20 | 28.09 | 34.70 | 22.16 | 568 | 0.11 |
| 55 | 28.12 | 34.70 | 0.64 | 22.15 | 30 | 28.09 | 34.71 | 22.17 | 567 | 0.17 |
| 110 | 27.58 | 34.71 | 0.64 | 22.33 | 50 | 28.11 | 34.70 | 22.15 | 568 | 0.28 |
| 165 | 15.78 | 34.63 | 1.52 | 25.53 | 75 | 28.09 | 34.70 | 22.16 | 568 | 0.43 |
| 218 | 11.14 | 34.58 | 2.60 | 26.44 | 100 | 28.05 | 34.71 | 22.18 | 566 | 0.57 |
| 271 | 9.88 | 34.65 | 2.84 | 26.72 | 150 | 18.70 | 34.80 | 24.96 | 300 | 0.79 |
| 324 | 9.24 | 34.65 | 2.87 | 26.83 | 200 | 12.60 | 34.52 | 26.12 | 190 | 0.92 |
| 382 | 8.66 | 34.62 | 2.89 | 26.89 | 250 | 10.37 | 34.63 | 26.62 | 143 | 1.00 |
| 436 | 8.35b) | 34.62 | 2.94 | 26.94 | 300 | 9.52 | 34.65 | 26.78 | 128 | 1.07 |
| 543 | 7.37 | 34.56 | 3.17 | 27.04 | 400 | 8.58 | 34.62 | 26.91 | 116 | 1.20 |
| 650 | 6.50 | 34.53 | 3.32 | 27.14 | 500 | 7.79 | 34.58 | 27.00 | 107 | 1.32 |

HUGH M. SMITH; February 21, 1952; 1040 GCT; 7°04'N, 179°59'E; wind, 080°, 13 kt; weather, missing; sea, moderate; wire angle, 03°. 32

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.92c) | 34.70 | 0.49 | 22.22c) | 0 | 27.92 | 34.70 | 22.22 | 562 | 0.00 |
| 10 | 27.96 | 34.68 | 0.57 | 22.19 | 10 | 27.96 | 34.68 | 22.19 | 565 | 0.06 |
| 30 | 27.92 | 34.70 | 0.51 | 22.22 | 20 | 27.94 | 34.69 | 22.20 | 564 | 0.11 |
| 60 | 27.94 | 34.70 | 0.56 | 22.21 | 30 | 27.92 | 34.70 | 22.21 | 562 | 0.17 |
| 120 | 20.53 | 34.87 | 0.73 | 24.54 | 50 | 27.94 | 34.70 | 22.21 | 563 | 0.28 |
| 180 | 13.00 | 34.51 | 1.92 | 26.03 | 75 | 27.86 | 34.70 | 22.24 | 560 | 0.42 |
| 240 | 10.37 | 34.60 | 2.74 | 26.60 | 100 | 24.40 | 34.96 | 23.51 | 439 | 0.55 |
| 297 | 9.32 | 34.64 | 2.79 | 26.80 | 150 | 15.76 | 34.64 | 25.54 | 245 | 0.72 |
| 355 | 8.77 | 34.63 | 2.82 | 26.89 | 200 | 11.60 | 34.55 | 26.33 | 170 | 0.83 |
| 413 | 8.32 | 34.60 | 2.78 | 26.93 | 250 | 10.18 | 34.61 | 26.64 | 141 | 0.91 |
| 466 | 7.90d) | 34.60 | 2.86 | 27.00d) | 300 | 9.27 | 34.64 | 26.81 | 124 | 0.98 |
| 581 | 7.07 | 34.55 | 3.04 | 27.03 | 400 | 8.42 | 34.61 | 26.92 | 114 | 1.11 |
| 693 | 6.28 | 34.52 | 3.16 | 27.16 | 500 | 7.69 | 34.59 | 27.02 | 105 | 1.22 |

a) Duplicate values: temperature, 8.07°C; sigma-t, 26.95 g/L.
b) Duplicate value, 8.39°C.
c) Auxiliary thermometer in Nansen bottle at surface was broken (a single protected thermometer was used in the surface bottle only). An average value from nearby bottles in the rack was used for correction; temperature and sigma-t may be in error by 0.01.
d) Duplicate values: temperature, 7.96°C; sigma-t, 26.99 g/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 33 | HUGH M. SMITH; February 21, 1952; 1936 GCT; 8°03'N, 179°58'W; wind, 070°, 6 kt; weather, precipitation within sight; sea, moderate; wire angle, 05°. | | | | | | | | | |
| 5 | 27.52 | 34.70 | 0.62 | 22.35 | 0 | (27.52) | (34.70) | (22.35) | (550) | (0.00) |
| 15 | 27.54 | 34.69 | 0.60 | 22.33 | 10 | 27.53 | 34.70 | 22.34 | 550 | 0.06 |
| 31 | 27.50 | 34.70 | 0.62 | 22.35 | 20 | 27.53 | 34.69 | 22.34 | 551 | 0.11 |
| 60 | 27.53 | 34.69 | 0.66 | 22.34 | 30 | 27.50 | 34.70 | 22.35 | 549 | 0.16 |
| 113 | 19.28 | 34.80 | 0.82 | 24.81 | 50 | 27.52 | 34.69 | 22.34 | 551 | 0.28 |
| 165 | 12.17 | 34.47 | 2.29 | 26.17 | 75 | 27.50 | 34.70 | 22.35 | 549 | 0.41 |
| 219 | 10.56 | 34.58 | 2.86 | 26.55 | 100 | 22.08 | 34.90 | 24.14 | 379 | 0.53 |
| 272 | 10.00 | 34.66 | 2.95 | 26.71 | 150 | 13.60 | 34.47 | 25.88 | 213 | 0.68 |
| 325 | 9.53 | 34.66 | 3.08 | 26.78 | 200 | 11.00 | 34.54 | 26.44 | 160 | 0.78 |
| 383 | 9.03 | 34.65 | 3.03 | 26.86 | 250 | 10.20 | 34.63 | 26.65 | 140 | 0.86 |
| 437 | 8.51a) | 34.61 | 3.08 | 26.91a) | 300 | 9.78 | 34.66 | 26.74 | 131 | 0.93 |
| 544 | 7.48 | 34.56 | 3.17 | 27.03 | 400 | 8.86 | 34.63 | 26.87 | 119 | 1.06 |
| 650 | 6.56 | 34.55 | 3.38 | 27.14 | 500 | 7.96 | 34.57 | 26.96 | 110 | 1.18 |
| 34 | HUGH M. SMITH; February 22, 1952; 0355, missing, 0429 GCT; 8°58'N, 179°55'W; wind, 050°, 21 kt; weather, drizzle; sea, rough; wire angle, 25°, 15°, missing. | | | | | | | | | |
| 0 | 27.05 | 34.48 | 0.50 | 22.34 | 0 | 27.05 | 34.48 | 22.33 | 551 | 0.00 |
| 10 | 27.08 | 34.49 | 0.51 | 22.33 | 10 | 27.08 | 34.49 | 22.33 | 551 | 0.06 |
| 30 | 27.02 | 34.49 | 0.54 | 22.35 | 20 | 27.05 | 34.49 | 22.34 | 550 | 0.11 |
| 58 | 27.03 | 34.49 | 0.58 | 22.35 | 30 | 27.02 | 34.49 | 22.35 | 550 | 0.16 |
| | | | | | 50 | 27.02 | 34.49 | 22.35 | 550 | 0.28 |
| 116 | 16.20 | 34.63 | 1.36 | 25.44 | 75 | 26.99 | 34.51 | 22.38 | 547 | 0.41 |
| | | | | | 100 | 19.65 | 34.83 | 24.74 | 321 | 0.52 |
| 162 | 11.34 | 34.52 | 2.50 | 26.36 | 150 | 11.83 | 34.48 | 26.24 | 179 | 0.65 |
| 215 | 10.45 | 34.69 | 2.90 | 26.65 | 200 | 10.68 | 34.67 | 26.59 | 145 | 0.73 |
| 270 | 9.82 | 34.65 | 2.94 | 26.73 | 250 | 10.10 | 34.68 | 26.71 | 135 | 0.81 |
| 323 | 9.30 | 34.64 | 3.01 | 26.81 | 300 | 9.58 | 34.64 | 26.76 | 129 | 0.88 |
| 376 | 8.88 | 34.62 | 2.95 | 26.86 | 400 | 8.70 | 34.60 | 26.87 | 119 | 1.01 |
| 427 | 8.47b) | 34.58 | 3.05 | 26.89b) | 500 | 7.86 | 34.56 | 26.97 | 110 | 1.13 |
| 540 | 7.47 | 34.56 | 3.21 | 27.03 | | | | | | |
| 650 | 6.72 | 34.53 | 3.23 | 27.11 | | | | | | |
| 35 | HUGH M. SMITH; March 2, 1952; 0409 GCT; 5°00'S, 168°57'W; wind, 060°, 9 kt; weather, partly cloudy; sea, smooth; wire angle, 18°. | | | | | | | | | |
| 0 | 28.89 | 35.58 | 0.48 | 22.56 | 0 | 28.89 | 35.58 | 22.56 | 530 | 0.00 |
| 10 | 28.38 | 35.56 | 0.51 | 22.71 | 10 | 28.38 | 35.56 | 22.71 | 515 | 0.05 |
| 23 | 28.31 | 35.58 | 0.50 | 22.75 | 20 | 28.32 | 35.58 | 22.75 | 512 | 0.10 |
| 52 | 28.29 | 35.60 | 0.50 | 22.77 | 30 | 28.31 | 35.59 | 22.76 | 511 | 0.16 |
| 103 | 27.70 | 35.53 | 0.66 | 22.91 | 50 | 28.29 | 35.60 | 22.77 | 509 | 0.26 |
| 153 | 27.52 | 35.67 | 0.70 | 23.07 | 75 | 28.15 | 35.59 | 22.81 | 506 | 0.38 |
| 202 | 22.54 | 36.09 | 0.84 | 24.91 | 100 | 27.76 | 35.53 | 22.89 | 498 | 0.51 |
| 251 | 15.90 | 35.27 | 1.49 | 26.00 | 150 | 27.53 | 35.66 | 23.06 | 481 | 0.76 |
| 301 | 12.02 | 34.92 | 1.92 | 26.54 | 200 | 22.92 | 36.09 | 24.80 | 316 | 0.96 |
| 355 | 9.83 | 34.75 | 2.13 | 26.80 | 250 | 16.05 | 35.29 | 25.98 | 204 | 1.10 |
| 404 | 9.08c) | 34.69 | 2.30 | 26.88 | 300 | 12.03 | 34.92 | 26.54 | 150 | 1.19 |
| 503 | 8.08 | 34.62 | 2.36 | 26.98 | 400 | 9.16 | 34.69 | 26.87 | 119 | 1.33 |
| 603 | 6.70 | 34.52 | 2.48 | 27.10 | 500 | 8.10 | 34.62 | 26.98 | 108 | 1.46 |

a) Duplicate values: temperature, 8.55°C; sigma-t, 26.90 g/L.
b) Duplicate values: temperature, 8.52°C; sigma-t, 26.88 g/L.
c) Duplicate value, 9.12°C.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; March 2, 1952; 1254 GCT; 4°02'S, 168°58'W; wind, 060°, 13 kt; weather, clear; sea, smooth; wire angle, 28°. 36

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.94 | 35.46 | 0.55 | 22.78 | 0 | 27.94 | 35.46 | 22.78 | 508 | 0.00 |
| 9 | 27.96 | 35.46 | 0.55 | 22.77 | 10 | 27.96 | 35.46 | 22.77 | 509 | 0.05 |
| 27 | 27.90 | 35.47 | 0.55 | 22.80 | 20 | 27.93 | 35.47 | 22.79 | 507 | 0.10 |
| 52 | 27.84 | 35.48 | 0.55 | 22.83 | 30 | 27.90 | 35.47 | 22.80 | 506 | 0.15 |
| 101 | 27.85 | 35.50 | 0.57 | 22.84 | 50 | 27.85 | 35.48 | 22.82 | 504 | 0.25 |
| 147 | 27.34 | 35.82 | 0.70 | 23.25 | 75 | 27.84 | 35.49 | 22.83 | 503 | 0.38 |
| 193 | 17.56 | 35.45 | 1.25 | 25.74 | 100 | 27.85 | 35.50 | 22.84 | 503 | 0.51 |
| 240 | 12.44 | 34.97 | 1.91 | 26.50 | 150 | 27.07 | 35.84 | 23.35 | 454 | 0.75 |
| 287 | 10.48 | 34.79 | 2.11 | 26.72 | 200 | 17.34 | 35.42 | 25.77 | 223 | 0.92 |
| 334 | 9.84 | 34.72 | 2.20 | 26.78 | 250 | 12.12 | 34.94 | 26.54 | 150 | 1.02 |
| 377 | 9.29a) | 34.70 | 2.24 | 26.86a) | 300 | 10.27 | 34.76 | 26.74 | 132 | 1.10 |
| 474 | 8.18 | 34.62 | 2.41 | 26.97 | 400 | 9.04 | 34.68 | 26.88 | 118 | 1.23 |
| 569 | 7.31 | 34.58 | 2.65 | 27.06 | 500 | 7.92 | 34.60 | 26.99 | 108 | 1.35 |

HUGH M. SMITH; March 2, 1952; 2231 GCT; 3°04'S, 168°59'W; wind, 070°, 14 kt; weather, partly cloudy; sea, slight; wire angle, 45°. 37

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.84 | 35.50 | 0.59 | 22.84 | 0 | 27.84 | 35.50 | 22.84 | 502 | 0.00 |
| 12 | 27.80 | 35.50 | 0.57 | 22.86 | 10 | 27.80 | 35.50 | 22.86 | 501 | 0.05 |
| 26 | 27.72 | 35.48 | 0.56 | 22.87 | 20 | 27.78 | 35.49 | 22.86 | 501 | 0.10 |
| 51 | 27.65 | 35.49 | 0.57 | 22.90 | 30 | 27.71 | 35.48 | 22.87 | 500 | 0.15 |
| 95 | 27.62 | 35.47 | 0.57 | 22.89 | 50 | 27.64 | 35.49 | 22.90 | 497 | 0.25 |
| 133 | 27.30 | 35.58 | 0.69 | 23.08 | 75 | 27.62 | 35.48 | 22.90 | 497 | 0.38 |
| 166 | 18.97 | 35.56 | 1.23 | 25.47 | 100 | 27.61 | 35.48 | 22.90 | 497 | 0.50 |
| 196 | 15.00 | 35.19 | 1.64 | 26.14 | 150 | 23.57 | 35.79 | 24.39 | 355 | 0.72 |
| 230 | 12.32 | 34.93 | 1.97 | 26.49 | 200 | 14.80 | 35.17 | 26.16 | 186 | 0.86 |
| 263 | 10.50 | 34.77 | 1.99 | 26.70 | 250 | 11.46 | 34.85 | 26.59 | 145 | 0.94 |
| 295 | 10.16b) | 34.76 | 2.14 | 26.76b) | 300 | 10.15 | 34.76 | 26.76 | 130 | 1.02 |
| 359 | 9.87 | 34.76 | 2.07 | 26.81 | 400 | 9.43 | 34.72 | 26.85 | 121 | 1.15 |
| 452 | 8.76 | 34.66 | 2.28 | 26.91 | 500 | (8.32) | (34.64) | (26.96) | (110) | (1.27) |

HUGH M. SMITH; March 3, 1952; 0829, 0910 GCT; 2°03'S, 168°57'W; wind, 080°, 14 kt; weather, clear; sea, moderate; wire angle, 45°, 45°. 38

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 27.15 | 35.26 | 0.70 | 22.89 | 0 | (27.15) | (35.26) | (22.89) | (498) | (0.00) |
| 13 | 27.18 | 35.26 | 0.71 | 22.88 | 10 | 27.17 | 35.26 | 22.88 | 499 | 0.05 |
| 28 | 27.08 | 35.26 | 0.65 | 22.91 | 20 | 27.13 | 35.26 | 22.89 | 498 | 0.10 |
| 55 | 27.00 | 35.28 | 0.65 | 22.95 | 30 | 27.08 | 35.26 | 22.91 | 496 | 0.15 |
| 107 | 27.11 | 35.54 | 0.74 | 23.11 | 50 | 27.01 | 35.30 | 22.96 | 491 | 0.25 |
| | | | | | 75 | 27.04 | 35.44 | 23.06 | 482 | 0.37 |
| 161 | 18.45 | 35.51 | 1.31 | 25.57 | 100 | 27.09 | 35.52 | 23.10 | 478 | 0.49 |
| 213 | 12.28 | 34.93 | 1.70 | 26.50 | 150 | 19.60 | 35.60 | 25.34 | 264 | 0.68 |
| 264 | 11.24 | 34.80 | 2.04 | 26.59 | 200 | 14.38 | 35.11 | 26.21 | 182 | 0.80 |
| 317 | 10.69 | 34.76 | 2.21 | 26.66 | 250 | 11.40 | 34.82 | 26.58 | 147 | 0.88 |
| 378 | 10.10 | 34.73 | 2.16 | 26.74 | 300 | 10.86 | 34.78 | 26.65 | 140 | 0.96 |
| 441 | 9.60 | 34.68 | 2.25 | 26.79 | 400 | 9.94 | 34.71 | 26.75 | 130 | 1.10 |
| 554 | 8.50 | 34.64 | 2.44 | 26.93 | 500 | 9.05 | 34.65 | 26.86 | 120 | 1.23 |
| 689 | 6.40 | 34.55 | 2.68 | 27.17 | | | | | | |

a) Duplicate values: temperature, 9.33°C; sigma-t, 26.85 g/L.
b) Duplicate values: temperature, 10.19°C; sigma-t, 26.75 g/L.

HBL

HMS-14

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 39 | HUGH M. SMITH; March 3, 1952; 1901 GCT; 1°02'S, 168°54'W; wind, 090°, 14 kt; weather, partly cloudy; sea, moderate; wire angle, 25°. | | | | | | | | | |
| 2 | 26.89 | 35.26 | 0.69 | 22.97 | 0 | (26.89) | (35.26) | (22.97) | (490) | (0.00) |
| 15 | 26.92 | 35.25 | 0.72 | 22.95 | 10 | 26.90 | 35.25 | 22.96 | 491 | 0.05 |
| 34 | 26.88 | 35.27 | 0.66 | 22.98 | 20 | 26.91 | 35.26 | 22.96 | 491 | 0.10 |
| 69 | 26.86 | 35.31 | 0.67 | 23.02 | 30 | 26.90 | 35.27 | 22.97 | 490 | 0.15 |
| 134 | 21.50 | 35.66 | 1.02 | 24.88 | 50 | 26.87 | 35.28 | 22.99 | 488 | 0.25 |
| 199 | 13.10 | 35.00 | 1.49 | 26.39 | 75 | 26.84 | 35.35 | 23.06 | 482 | 0.37 |
| 266 | 11.58 | 34.83 | 1.89 | 26.55 | 100 | 25.39 | 35.60 | 23.69 | 421 | 0.48 |
| 327 | 10.84 | 34.78 | 2.23 | 26.65 | 150 | 19.38 | 35.56 | 25.37 | 262 | 0.66 |
| 395 | 9.98 | 34.74 | 2.21 | 26.77 | 200 | 13.00 | 34.99 | 26.40 | 163 | 0.76 |
| 467 | 9.20 | 34.69 | 2.22 | 26.86 | 250 | 11.72 | 34.84 | 26.53 | 151 | 0.85 |
| 534 | 8.34a) | 34.63 | 2.43 | 26.95a) | 300 | 11.21 | 34.81 | 26.61 | 144 | 0.92 |
| 657 | 6.32 | 34.56 | 2.61 | 27.19 | 400 | 9.95 | 34.74 | 26.78 | 128 | 1.07 |
| 790 | 5.41 | 34.53 | 2.68 | 27.28 | 500 | 8.85 | 34.66 | 26.90 | 117 | 1.20 |
| 40 | HUGH M. SMITH; March 4, 1952; 0455 GCT; 0°01'N, 169°00'W; wind, 090°, 16 kt; weather, partly cloudy; sea, moderate; wire angle, 45°. | | | | | | | | | |
| 4 | 26.74 | 35.29 | 0.61 | 23.04 | 0 | (26.74) | (35.29) | (23.04) | (484) | (0.00) |
| 15 | 26.74 | 35.28 | 0.61 | 23.03 | 10 | 26.74 | 35.28 | 23.03 | 484 | 0.05 |
| 24 | 26.58 | 35.28 | 0.62 | 23.08 | 20 | 26.62 | 35.28 | 23.07 | 481 | 0.07 |
| 45 | 26.48 | 35.29 | 0.65 | 23.12 | 30 | 26.56 | 35.28 | 23.09 | 479 | 0.14 |
| 114 | 22.55 | 35.21 | 0.95 | 24.24 | 50 | 26.42 | 35.28 | 23.13 | 475 | 0.24 |
| 153 | 18.66 | 35.23 | 1.05 | 25.30 | 75 | 26.23 | 35.28 | 23.19 | 469 | 0.36 |
| 193 | 15.24 | 35.10 | 1.27 | 26.01 | 100 | 24.60 | 35.24 | 23.66 | 424 | 0.47 |
| 237 | 12.24 | 34.88 | 1.64 | 26.47 | 150 | 18.67 | 35.23 | 25.30 | 268 | 0.65 |
| 286 | 11.55 | 34.84 | 1.97 | 26.56 | 200 | 14.55 | 35.06 | 26.13 | 189 | 0.77 |
| 337 | 10.81b) | 34.78 | 2.21 | 26.66b) | 250 | 12.07 | 34.87 | 26.49 | 155 | 0.86 |
| 441c) | 9.02 | 34.67 | 2.48 | 26.88 | 300 | 11.39 | 34.82 | 26.58 | 146 | 0.93 |
| 567c) | 7.69 | 34.60 | 2.58 | 27.03 | 400 | 9.80 | 34.71 | 26.78 | 128 | 1.08 |
| | | | | | 500 | 8.32 | 34.64 | 26.96 | 110 | 1.21 |
| 41 | HUGH M. SMITH; March 4, 1952; 1448 GCT; 1°03'N, 169°00'W; wind, 080°, 15 kt; weather, clear; sea, rough; wire angle, 37°. | | | | | | | | | |
| 4 | 26.46 | 35.16 | 0.63 | 23.03 | 0 | (26.46) | (35.16) | (23.03) | (484) | (0.00) |
| 15 | 26.48 | 35.17 | 0.61 | 23.03 | 10 | 26.47 | 35.17 | 23.04 | 484 | 0.05 |
| 30 | 26.44 | 35.16 | 0.60 | 23.04 | 20 | 26.46 | 35.17 | 23.04 | 484 | 0.10 |
| 59 | 26.18 | 35.19 | 0.66 | 23.14 | 30 | 26.44 | 35.16 | 23.04 | 484 | 0.14 |
| 113 | 25.04 | 35.16 | 0.79 | 23.47 | 50 | 26.25 | 35.18 | 23.11 | 477 | 0.24 |
| 167 | 16.12 | 34.97 | 1.20 | 25.72 | 75 | 26.20 | 35.22 | 23.16 | 472 | 0.36 |
| 222 | 12.02 | 34.85 | 1.71 | 26.49 | 100 | 25.62 | 35.19 | 23.31 | 457 | 0.48 |
| 275d) | 11.42 | 34.80 | 1.93 | 26.56 | 150 | 18.39 | 35.00 | 25.19 | 278 | 0.67 |
| 331 | 10.25 | 34.73 | 2.13 | 26.72 | 200 | 12.61 | 34.88 | 26.39 | 164 | 0.78 |
| 392 | 9.88 | 34.70 | 2.28 | 26.75 | 250 | 11.82 | 34.83 | 26.51 | 153 | 0.86 |
| 451 | 9.07e) | 34.66 | 2.35 | 26.86e) | 300 | 10.85 | 34.76 | 26.63 | 141 | 0.94 |
| 565 | 7.26 | 34.58 | 2.54 | 27.07 | 400 | 9.80 | 34.70 | 26.77 | 128 | 1.08 |
| 694 | 5.99 | 34.52 | 2.68 | 27.20 | 500 | 8.19 | 34.61 | 26.96 | 110 | 1.21 |

a) Duplicate values: temperature, 8.39°C; sigma-t, 26.94 g/L.
b) Duplicate values: temperature, 10.85°C; sigma-t, 26.66 g/L.
c) Two bottom Nansen bottles had slid to end of wire when raised, but values acceptable; a deeper bottle pretripped but was not recast.
d) Duplicate depth, 288 meters; bottle apparently slipped on wire.
e) Duplicate values: temperature, 9.12°C; sigma-t, 26.85 g/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; March 5, 1952; 0043, 0144, 0245 GCT; 2°06'N, 168°57'W; wind, 090°, 16 kt; weather, partly cloudy; sea, moderate; wire angle, 42°, 32°, 35°. | | | | | | | | | | 42 |
| 3 | 27.02 | 35.17 | 0.59 | 22.86 | 0 | (27.02) | (35.17) | (22.86) | (501) | (0.00) |
| 14 | 26.94 | 35.17 | 0.59 | 22.88 | 10 | 26.99 | 35.17 | 22.87 | 500 | 0.05 |
| 28 | 26.87 | 35.15 | 0.62 | 22.89 | 20 | 26.94 | 35.16 | 22.88 | 499 | 0.10 |
| 58 | 26.82 | 35.16 | 0.67 | 22.92 | 30 | 26.87 | 35.15 | 22.90 | 497 | 0.15 |
| 114 | 25.08 | 35.10 | 0.84 | 23.41 | 50 | 26.84 | 35.16 | 22.91 | 496 | 0.25 |
| 170 | 14.03 | 34.70 | 1.52 | 25.96 | 75 | 26.74 | 35.16 | 22.94 | 493 | 0.37 |
| 230 | 11.04 | 34.79 | 1.86 | 26.62 | 100 | 26.10 | 35.15 | 23.14 | 474 | 0.50 |
| 285 | 10.72 | 34.78 | 2.04 | 26.67 | 150 | 16.60 | 34.78 | 25.46 | 253 | 0.68 |
| | | | | | 200 | 11.50 | 34.78 | 26.53 | 151 | 0.78 |
| 394 | 9.81 | 34.71 | 2.29 | 26.78 | 250 | 10.98 | 34.79 | 26.64 | 141 | 0.86 |
| 472 | 9.18 | 34.68 | 2.34 | 26.86 | 300 | 10.61 | 34.77 | 26.68 | 137 | 0.93 |
| | | | | | 400 | 9.80 | 34.71 | 26.78 | 128 | 1.08 |
| 522 | 8.46a) | 34.62 | 2.39 | 26.92 | 500 | 8.80 | 34.65 | 26.90 | 117 | 1.21 |
| 663 | 6.74 | 34.55 | 2.83 | 27.12 | | | | | | |
| 815 | 5.22 | 34.53 | 2.85 | 27.30 | | | | | | |
| HUGH M. SMITH; March 5, 1952; 1140, 1214 GCT; 3°05'N, 169°00'W; wind, 130°, 10 kt; weather, clear; sea, moderate; wire angle, 42°, 54°. | | | | | | | | | | 43 |
| 0 | 27.16 | 35.11 | 0.63 | 22.77 | 0 | 27.16 | 35.11 | 22.77 | 509 | 0.00 |
| 13 | 27.18 | 35.10 | 0.58 | 22.76 | 10 | 27.18 | 35.10 | 22.76 | 511 | 0.05 |
| 27 | 27.16 | 35.12 | 0.61 | 22.78 | 20 | 27.17 | 35.11 | 22.77 | 510 | 0.10 |
| 55 | 27.08 | 35.12 | 0.64 | 22.81 | 30 | 27.16 | 35.12 | 22.78 | 508 | 0.15 |
| 99 | 27.03 | 35.14 | 0.68 | 22.83 | 50 | 27.08 | 35.12 | 22.80 | 506 | 0.26 |
| 137 | 26.81 | 35.16 | 0.70 | 22.92 | 75 | 27.03 | 35.13 | 22.83 | 504 | 0.38 |
| 173 | 16.07 | 34.68 | 1.32b) | 25.51 | 100 | 27.03 | 35.14 | 22.83 | 503 | 0.51 |
| 208 | 11.20 | 34.56 | 2.03 | 26.42 | 150 | 26.61 | 35.16 | 22.98 | 489 | 0.76 |
| | | | | | 200 | 12.00 | 34.55 | 26.26 | 177 | 0.93 |
| 225 | 10.92 | 34.61 | 1.97 | 26.51 | 250 | 10.18 | 34.62 | 26.66 | 140 | 1.01 |
| 263 | 9.91 | 34.63 | 2.27 | 26.70 | 300 | 9.78 | 34.70 | 26.77 | 128 | 1.08 |
| 304 | 9.73c) | 34.70 | 2.38 | 26.78c) | 400 | 8.75 | 34.64 | 26.89 | 117 | 1.21 |
| 403 | 8.70 | 34.63 | 2.41 | 26.89 | 500 | 7.81 | 34.60 | 27.01 | 106 | 1.33 |
| 527 | 7.56 | 34.59 | 2.56 | 27.04 | | | | | | |
| HUGH M. SMITH; March 5, 1952; 2224 GCT; 4°06'N, 168°57'W; wind, 040°, 19 kt; weather, cloudy; sea, rough; wire angle, 28°. | | | | | | | | | | 44 |
| 0 | 27.72 | 35.05 | 0.51 | 22.54 | 0 | 27.72 | 35.05 | 22.54 | 531 | 0.00 |
| 13 | 27.74 | 35.07 | 0.53 | 22.55 | 10 | 27.74 | 35.07 | 22.55 | 530 | 0.05 |
| 31 | 27.69 | 35.07 | 0.53 | 22.57 | 20 | 27.72 | 35.07 | 22.56 | 530 | 0.11 |
| 66 | 27.65 | 35.09 | 0.57 | 22.60 | 30 | 27.69 | 35.07 | 22.57 | 529 | 0.16 |
| 132 | 26.90 | 35.12 | 0.65 | 22.86 | 50 | 27.67 | 35.08 | 22.59 | 527 | 0.26 |
| 198 | 13.30 | 34.59 | 1.83 | 26.03 | 75 | 27.61 | 35.10 | 22.62 | 524 | 0.40 |
| 264 | 9.87 | 34.63 | 2.38 | 26.70 | 100 | 27.40 | 35.11 | 22.69 | 517 | 0.53 |
| 327 | 9.10 | 34.60 | 2.34 | 26.81 | 150 | 22.25 | 34.94 | 24.12 | 380 | 0.76 |
| 395 | 8.51 | 34.60 | 2.37 | 26.90 | 200 | 13.10 | 34.58 | 26.07 | 195 | 0.91 |
| 469 | 7.94 | 34.56 | 2.48 | 26.96 | 250 | 10.05 | 34.62 | 26.66 | 138 | 0.99 |
| 538 | 7.39d) | 34.55 | 2.90 | 27.03d) | 300 | 9.41 | 34.60 | 26.76 | 130 | 1.06 |
| 678 | 6.22 | 34.50 | 2.90 | 27.15 | 400 | 8.46 | 34.60 | 26.91 | 115 | 1.19 |
| 831 | 5.36 | 34.51 | 2.89 | 27.27 | 500 | 7.72 | 34.56 | 26.99 | 108 | 1.31 |

a) Duplicate value, 8.50°C.
b) Duplicate value, 1.38 µg at/L.
c) Duplicate values: temperature, 9.76°C; sigma-t, 26.77 g/L.
d) Duplicate values: temperature, 7.44°C; sigma-t, 27.02 g/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **45** | HUGH M. SMITH; March 6, 1952; 0611 GCT; 4°59'N, 168°56'W; wind, 050°, 18 kt; weather, cloudy; sea, rough; wire angle, 25°. | | | | | | | | | |
| 1 | 27.91 | 34.85 | 0.49 | 22.33 | 0 | (27.91) | (34.85) | (22.33) | (551) | (0.00) |
| 9 | 27.94 | 34.85 | 0.49 | 22.32 | 10 | 27.94 | 34.85 | 22.32 | 552 | 0.06 |
| 26 | 27.91 | 34.85 | 0.54 | 22.33 | 20 | 27.92 | 34.85 | 22.33 | 552 | 0.11 |
| 53 | 28.01 | 35.04 | 0.55 | 22.44 | 30 | 27.92 | 34.86 | 22.34 | 551 | 0.17 |
| 105 | 26.91 | 35.07 | 0.59 | 22.82 | 50 | 28.00 | 34.86 | 22.31 | 553 | 0.28 |
| 157 | 20.84 | 34.88 | 0.83 | 24.46 | 75 | 28.01 | 34.94 | 22.37 | 548 | 0.42 |
| 209 | 11.46 | 34.54 | 2.04 | 26.35 | 100 | 27.10 | 35.07 | 22.76 | 510 | 0.55 |
| 261 | 9.30 | 34.66 | 2.10 | 26.82 | 150 | 21.76 | 34.92 | 24.24 | 369 | 0.77 |
| 314 | 8.90 | 34.69 | 2.26 | 26.91 | 200 | 12.60 | 34.56 | 26.15 | 187 | 0.91 |
| 368 | 8.46 | 34.60 | 2.39 | 26.91 | 250 | 9.43 | 34.65 | 26.79 | 126 | 1.00 |
| 417 | 8.02a) | 34.60 | 2.39 | 26.98a) | 300 | 9.01 | 34.68 | 26.88 | 118 | 1.06 |
| 525 | 7.28 | 34.60 | 2.80 | 27.09 | 400 | 8.20 | 34.60 | 26.95 | 112 | 1.18 |
| 630 | 6.52 | 34.54 | 2.82 | 27.14 | 500 | 7.47 | 34.60 | 27.06 | 101 | 1.30 |
| **46** | HUGH M. SMITH; March 6, 1952; 1514 GCT; 5°52'N, 169°00'W; wind, 080°, 19 kt; weather, clear; sea, rough; wire angle, 08°. | | | | | | | | | |
| 0 | 27.92 | 34.97 | 0.54 | 22.42 | 0 | 27.92 | 34.97 | 22.42 | 543 | 0.00 |
| 11 | 27.94 | 34.98 | 0.49 | 22.42 | 10 | 27.94 | 34.98 | 22.42 | 543 | 0.05 |
| 31 | 27.91 | 34.96 | 0.53 | 22.41 | 20 | 27.92 | 34.97 | 22.42 | 543 | 0.11 |
| 60 | 27.93 | 34.97 | 0.55 | 22.42 | 30 | 27.91 | 34.96 | 22.41 | 543 | 0.16 |
| 116 | 23.62 | 34.91 | 0.64 | 23.71 | 50 | 27.93 | 34.97 | 22.42 | 543 | 0.27 |
| 177 | 15.08 | 34.59 | 1.63 | 25.66 | 75 | 27.92 | 34.97 | 22.42 | 543 | 0.41 |
| 235 | 10.48 | 34.61 | 2.51 | 26.58 | 100 | 27.83 | 34.97 | 22.45 | 540 | 0.54 |
| 293 | 9.40 | 34.63 | 2.56 | 26.78 | 150 | 19.32 | 34.76 | 24.77 | 318 | 0.76 |
| 351 | 8.76 | 34.60 | 2.40 | 26.86 | 200 | 12.18 | 34.57 | 26.24 | 179 | 0.89 |
| 409 | 8.37 | 34.58 | 2.47 | 26.91 | 250 | 10.18 | 34.62 | 26.64 | 140 | 0.97 |
| 462 | 7.95b) | 34.57 | 2.60 | 26.97b) | 300 | 9.35 | 34.62 | 26.78 | 127 | 1.04 |
| 578 | 7.12 | 34.53 | 2.88 | 27.05 | 400 | 8.42 | 34.58 | 26.90 | 116 | 1.17 |
| 690 | 6.08 | 34.51 | 3.07 | 27.18 | 500 | 7.65 | 34.56 | 27.00 | 117 | 1.29 |
| **47** | HUGH M. SMITH; March 7, 1952; 0442 GCT; 6°58'N, 168°54'W; wind, 080°, 16 kt; weather, rain; sea, very rough; wire angle, 00°. | | | | | | | | | |
| 3 | 27.85 | 34.90 | 0.50 | 22.39 | 0 | (27.85) | (34.90) | (22.39) | (546) | (0.00) |
| 13 | 27.88 | 34.88 | 0.47 | 22.36 | 10 | 27.87 | 34.89 | 22.38 | 547 | 0.06 |
| 32 | 27.89 | 34.97 | 0.49 | 22.43 | 20 | 27.88 | 34.93 | 22.40 | 544 | 0.11 |
| 63 | 27.88 | 34.95 | 0.53 | 22.42 | 30 | 27.89 | 34.97 | 22.43 | 542 | 0.16 |
| 122 | 23.26 | 34.96 | 0.67 | 23.85 | 50 | 27.88 | 34.96 | 22.43 | 542 | 0.27 |
| 180 | 14.33 | 34.63 | 1.67 | 25.85 | 75 | 27.85 | 34.95 | 22.43 | 542 | 0.41 |
| 238 | 10.58 | 34.69 | 2.54 | 26.63 | 100 | 27.50 | 34.97 | 22.56 | 530 | 0.54 |
| 298 | 9.52 | 34.69 | 2.59 | 26.81 | 150 | 18.42 | 34.79 | 25.03 | 294 | 0.75 |
| 357 | 8.92 | 34.66 | 2.67 | 26.89 | 200 | 12.20 | 34.60 | 26.26 | 177 | 0.87 |
| 417 | 8.56 | 34.67 | 2.70 | 26.95 | 250 | 10.30 | 34.69 | 26.68 | 137 | 0.96 |
| 471 | 8.17c) | 34.61 | 2.75 | 26.96c) | 300 | 9.51 | 34.69 | 26.81 | 125 | 1.02 |
| 588 | 7.40 | 34.55 | 2.96 | 27.03 | 400 | 8.64 | 34.67 | 26.93 | 113 | 1.15 |
| 701 | 6.55 | 34.52 | 3.01 | 27.12 | 500 | 7.97 | 34.59 | 26.98 | 109 | 1.27 |

a) Duplicate values: temperature, 8.07°C; sigma-t, 26.97 g/L.
b) Duplicate values: temperature, 7.99°C; sigma-t, 26.96 g/L.
c) Duplicate values: temperature, 8.21°C; sigma-t, 26.95 g/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |

HUGH M. SMITH; May 28, 1952; 1540, 1605 GCT; 8°59'N, 139°56'W; wind, 040°, 21 kt; weather, intermittent slight drizzle; sea, rough; wire angle, 12°, 12°. 1

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26.86 | 34.55 | 0.46 | 22.45 | 0 | (26.86) | (34.55) | (0.46) | (22.45) | (540) | (0.00) |
| 11 | 26.84 | 34.53 | 0.54 | 22.44 | 10 | 26.83 | 34.53 | 0.54 | 22.44 | 541 | 0.05 |
| 26 | 26.82 | 34.53 | 0.78 | 22.44 | 20 | 26.82 | 34.53 | 0.62 | 22.44 | 541 | 0.11 |
| 50 | 14.70 | 34.45 | 2.53 | 25.63 | 30 | 26.82 | 34.66 | 0.80 | 22.54 | 531 | 0.16 |
| 99 | 11.91 | 34.69 | 2.71 | 26.39 | 50 | 14.70 | 34.45 | 2.53 | 25.63 | 236 | 0.24 |
| 148 | 11.18 | 34.77 | 3.06 | 26.58 | 75 | 12.68 | 34.60 | 2.66 | 26.17 | 186 | 0.29 |
| 205 | 10.36 | 34.72 | 2.91 | 26.69 | 100 | 11.90 | 34.69 | 2.71 | 26.39 | 165 | 0.34 |
| | | | | | 150 | 11.15 | 34.77 | 3.06 | 26.59 | 146 | 0.42 |
| 253 | 9.98 | 34.70 | 3.09 | 26.74 | 200 | 10.43 | 34.73 | 2.91 | 26.68 | 137 | 0.49 |
| 303 | 9.66 | 34.69 | 3.12 | 26.79 | 250 | 10.01 | 34.70 | 3.10 | 26.74 | 132 | 0.56 |
| 351 | 9.35 | 34.67 | 2.99 | 26.82 | 300 | 9.68 | 34.69 | 3.12 | 26.78 | 128 | 0.63 |
| 401 | 8.90 | 34.66 | 3.11 | 26.89 | 400 | 8.91 | 34.66 | 3.11 | 26.89 | 118 | 0.76 |
| 451 | 8.28 | 34.63 | 3.48 | 26.96 | | | | | | | |
| 500 | 7.74 | 34.59 | 3.27 | 27.01 | | | | | | | |

HUGH M. SMITH; May 29, 1952; 0105 GCT; 7°51'N, 139°46'W; wind, 050°, 18 kt; weather, partly cloudy; sea, rough; wire angle, 05°. 2

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 26.90 | 34.61 | 0.43 | 22.48 | 0 | (26.90) | (34.61) | (0.43) | (22.48) | (537) | (0.00) |
| 15 | 26.90 | 34.61 | 0.39 | 22.48 | 10 | 26.90 | 34.61 | 0.40 | 22.48 | 537 | 0.05 |
| 30 | 26.82 | 34.62 | 0.40 | 22.51 | 20 | 26.88 | 34.62 | 0.40 | 22.49 | 536 | 0.11 |
| 55 | 15.32 | 34.60 | 2.40 | 25.61 | 30 | 26.82 | 34.62 | 0.40 | 22.51 | 534 | 0.16 |
| 104 | 11.86 | 34.79 | 2.68 | 26.47 | 50 | 20.30 | 34.69 | 1.71 | 24.46 | 348 | 0.25 |
| 152 | 10.98 | 34.78 | 2.74 | 26.63 | 75 | 13.10 | 34.67 | 2.61 | 26.14 | 189 | 0.32 |
| 200 | 10.31 | 34.72 | 2.40a) | 26.70 | 100 | 11.99 | 34.79 | 2.72 | 26.63 | 141 | 0.36 |
| 247 | 9.92 | 34.71 | 2.76 | 26.76 | 150 | 11.01 | 34.78 | 2.74 | 26.62 | 143 | 0.44 |
| 295 | 9.64 | 34.70 | 2.76 | 26.80 | 200 | 10.31 | 34.72 | 2.40 | 26.70 | 135 | 0.51 |
| 345 | 9.26 | 34.67 | 2.66b) | 26.84 | 250 | 9.88 | 34.71 | 2.75 | 26.76 | 129 | 0.58 |
| 393 | 8.76 | 34.66 | 3.03 | 26.91 | 300 | 9.60 | 34.70 | 2.75 | 26.80 | 125 | 0.65 |
| 442 | 8.26 | 34.62 | 3.04 | 26.96 | 400 | 8.70 | 34.66 | 3.02 | 26.92 | 114 | 0.77 |
| 493 | 7.63 | 34.57 | 3.17 | 27.01 | | | | | | | |

HUGH M. SMITH; May 29, 1952; 1120 GCT; 7°00'N, 140°00'W; wind, 050°, 18 kt; weather, missing; sea, rough; wire angle, 00°. 3

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 27.47 | 34.54 | 0.48 | 22.24 | 0 | (27.48) | (34.54) | (0.48) | (22.24) | (560) | (0.00) |
| 15 | 27.46 | 34.53 | 0.54 | 22.24 | 10 | 27.46 | 34.53 | 0.52 | 22.24 | 560 | 0.06 |
| 30 | 27.42 | 34.60 | 0.54 | 22.30 | 20 | 27.45 | 34.55 | 0.54 | 22.26 | 558 | 0.11 |
| 54 | 26.10 | 34.79 | 0.63 | 22.87 | 30 | 27.42 | 34.60 | 0.54 | 22.30 | 554 | 0.17 |
| 103 | 12.26 | 34.72 | 2.70 | 26.34 | 50 | 26.35 | 34.78 | 0.61 | 22.78 | 508 | 0.27 |
| 153 | 11.28 | 34.79 | 3.02 | 26.58 | 75 | 17.40 | 34.63 | 1.86 | 25.15 | 282 | 0.37 |
| 201 | 10.42 | 34.74 | 2.72 | 26.70 | 100 | 12.32 | 34.71 | 2.69 | 26.32 | 171 | 0.43 |
| 250 | 9.98 | 34.72 | 2.90 | 26.76 | 150 | 11.35 | 34.79 | 3.01 | 26.57 | 148 | 0.51 |
| 299 | 9.59 | 34.71 | 2.91 | 26.81 | 200 | 10.46 | 34.74 | 2.72 | 26.69 | 135 | 0.59 |
| 347 | 9.15 | 34.69 | 3.00 | 26.87 | 250 | 9.98 | 34.72 | 2.89 | 26.76 | 130 | 0.66 |
| 396 | 8.73 | 34.67 | 3.10 | 26.92 | 300 | 9.58 | 34.71 | 2.91 | 26.98 | 109 | 0.72 |
| 445 | 8.36 | 34.66 | 3.12 | 26.97 | 400 | 8.70 | 34.67 | 3.10 | 26.93 | 114 | 0.85 |
| 495 | 7.90 | 34.62 | 3.29 | 27.01 | | | | | | | |

a) Duplicate value, 2.52 µg at/L. Duplicate phosphate values are reported when duplicate determinations of inorganic phosphate differ in extinction value by more than 0.01 (approximately 0.05 µg at/L). Depth of this duplicate sample only determined from L-Z curve because of erratic unprotected thermometer.

b) Duplicate value, 2.74 µg at/L.

| | OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| | m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| 4 | HUGH M. SMITH; May 29, 1952; 1848, 1914 GCT; 6°36'N, 139°44'W; wind, 040°, 14 kt; weather, partly cloudy; sea, moderate; wire angle, 04°, 12°. | | | | | | | | | | | |
| | 2 | 27.71 | 34.60 | 0.45 | 22.21 | 0 | (27.72) | (34.60) | (0.45) | (22.21) | (563) | (0.00) |
| | 12 | 27.69 | 34.60 | 0.48 | 22.22 | 10 | 27.68 | 34.60 | 0.47 | 22.22 | 562 | 0.06 |
| | 27 | 27.64 | 34.60 | 0.41 | 22.23 | 20 | 27.65 | 34.60 | 0.44 | 22.23 | 561 | 0.11 |
| | 52 | 27.04 | 34.89 | 0.53 | 22.64 | 30 | 27.62 | 34.60 | 0.42 | 22.24 | 560 | 0.17 |
| | 102 | 13.46 | 34.55 | 2.06 | 25.97 | 50 | 27.08 | 34.89 | 0.53 | 22.63 | 522 | 0.28 |
| | 151 | 11.20 | 34.72 | 2.62 | 26.54 | 75 | 16.50 | 34.66 | 1.90 | 25.39 | 260 | 0.38 |
| | 199 | 10.17 | 34.70 | 2.70 | 26.71 | 100 | 13.58 | 34.55 | 2.30 | 25.94 | 207 | 0.43 |
| | | | | | | 150 | 11.23 | 34.72 | 2.62 | 26.53 | 151 | 0.53 |
| | 236 | 9.76 | 34.70 | 2.61a) | 26.78 | 200 | 10.15 | 34.70 | 2.70 | 26.71 | 134 | 0.60 |
| | 282 | 9.32 | 34.69 | 2.65 | 26.84 | 250 | 9.62 | 34.69 | 2.65 | 26.79 | 126 | 0.67 |
| | 329 | 9.06 | 34.69 | 2.66 | 26.89 | 300 | 9.20 | 34.69 | 2.66 | 26.86 | 120 | 0.73 |
| | 375 | 8.72 | 34.66 | 2.73 | 26.92 | 400 | 8.52 | 34.65 | 2.83 | 26.94 | 113 | 0.86 |
| | 422 | 8.32 | 34.64 | 2.88 | 26.96 | | | | | | | |
| | 470 | 7.84 | 34.64 | 2.91 | 27.03 | | | | | | | |
| 5 | HUGH M. SMITH; May 30, 1952; 0202 GCT; 6°00'N, 140°00'W; wind, 070°, 13 kt; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | |
| | 2 | 27.91 | 34.51 | 0.47 | 22.08 | 0 | (27.91) | (34.51) | (0.47) | (22.08) | (576) | (0.00) |
| | 12 | 27.87 | - | - | | 10 | 27.88 | 34.52 | 0.48 | 22.10 | 574 | 0.06 |
| | 27 | 27.83 | 34.54 | 0.56 | 22.13 | 20 | 27.85 | 34.53 | 0.52 | 22.11 | 572 | 0.11 |
| | 52 | 27.72 | 34.66 | 0.75 | 22.25 | 30 | 27.82 | 34.54 | 0.57 | 22.13 | 571 | 0.17 |
| | 101 | 17.06 | 34.70 | 1.54 | 25.29 | 50 | 27.73 | 34.66 | 0.74 | 22.25 | 559 | 0.29 |
| | 150 | 11.52 | 34.67 | 2.72 | 26.44 | 75 | 25.48 | 34.85 | 0.89 | 23.12 | 476 | 0.42 |
| | 198 | 10.34 | 34.70 | 2.76 | 26.68 | 100 | 17.60 | 34.72 | 1.45 | 25.17 | 280 | 0.51 |
| | 247 | 9.87 | 34.70 | 2.79 | 26.76 | 150 | 11.52 | 34.67 | 2.72 | 26.44 | 160 | 0.62 |
| | 295 | 9.50 | 34.69 | 2.81 | 26.81 | 200 | 10.30 | 34.71 | 2.76 | 26.69 | 136 | 0.70 |
| | 344 | 9.17 | 34.67 | 2.92 | 26.85 | 250 | 9.85 | 34.70 | 2.80 | 26.76 | 129 | 0.77 |
| | 394 | 8.73 | 34.66 | 2.91 | 26.92 | 300 | 9.48 | 34.69 | 2.81 | 26.82 | 124 | 0.84 |
| | 442 | 8.33 | 34.64 | 3.04 | 26.96 | 400 | 8.66 | 34.66 | 2.91 | 26.92 | 114 | 0.96 |
| | 491 | 7.86 | 34.63 | 3.10 | 27.02 | | | | | | | |
| 6 | HUGH M. SMITH; May 30, 1952; 1035 GCT; 5°02'N, 139°58'W; wind, 030°, 8 kt; weather, intermittent slight drizzle; sea, slight; wire angle, 03°. | | | | | | | | | | | |
| | 2 | 28.03 | 34.46 | 0.45 | 22.00 | 0 | (28.03) | (34.46) | (0.45) | (22.00) | (583) | (0.00) |
| | 15 | 28.04 | 34.51 | 0.48 | 22.04 | 10 | 28.05 | 34.48 | 0.47 | 22.01 | 582 | 0.06 |
| | 29 | 27.96 | 34.75 | 0.53 | 22.24 | 20 | 28.00 | 34.68 | 0.50 | 22.17 | 566 | 0.12 |
| | 52 | 27.87 | 34.77 | 0.60 | 22.29 | 30 | 27.95 | 34.75 | 0.53 | 22.25 | 560 | 0.17 |
| | 103 | 21.10 | 34.88 | 0.97 | 24.39 | 50 | 27.88 | 34.77 | 0.59 | 21.95 | 587 | 0.28 |
| | 152 | 12.78 | 34.65 | 2.05 | 26.18 | 75 | 27.70 | 34.82 | 0.62 | 22.38 | 547 | 0.42 |
| | 199 | 10.80 | 34.72 | 2.65 | 26.61 | 100 | 21.88 | 34.89 | 0.90 | 24.19 | 374 | 0.54 |
| | 249 | 10.00 | 34.72 | 2.71 | 26.75 | 150 | 13.00 | 34.65 | 2.02 | 26.14 | 188 | 0.68 |
| | 297 | 9.50 | 34.70 | 2.58 | 26.82 | 200 | 10.80 | 34.72 | 2.65 | 26.61 | 143 | 0.77 |
| | 346 | 9.12 | 34.68 | 2.69 | 26.87 | 250 | 9.99 | 34.72 | 2.71 | 26.76 | 130 | 0.84 |
| | 394 | 8.78 | 34.66 | 2.75 | 26.91 | 300 | 9.48 | 34.70 | 2.59 | 26.82 | 123 | 0.90 |
| | 443 | 8.34 | 34.63 | 2.92 | 26.95 | 400 | 8.70 | 34.66 | 2.75 | 26.91 | 115 | 1.03 |
| | 492 | 8.04 | 34.61 | 2.90 | 26.98 | | | | | | | |

a) Duplicate value, 2.66 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| HUGH M. SMITH; May 30, 1952; 1835 GCT; 4°05'N, 139°58'W; wind, 180°, 9 kt; weather, cloudy; sea, slight; wire angle, 30°. | | | | | | | | | | | 7 |
| 0 | 28.25 | 34.47 | 0.43 | 21.94 | 0 | 28.25 | 34.47 | 0.43 | 21.94 | 589 | 0.00 |
| 9 | 28.24 | 34.45 | 0.48 | 21.92 | 10 | 28.24 | 34.46 | 0.48 | 21.93 | 590 | 0.06 |
| 22 | 28.24 | 34.49 | 0.55 | 21.95 | 20 | 28.23 | 34.48 | 0.53 | 21.95 | 588 | 0.12 |
| 43 | 28.03 | 34.65 | 0.63 | 22.14 | 30 | 28.20 | 34.53 | 0.54 | 22.00 | 583 | 0.18 |
| 85 | 25.94 | 34.97 | 0.94 | 23.05 | 50 | 28.00 | 34.69 | 0.65 | 22.18 | 566 | 0.29 |
| 124 | 16.73 | 34.77 | 1.84 | 25.42 | 75 | 26.88 | 34.93 | 0.82 | 22.73 | 514 | 0.43 |
| 165 | 11.52 | 34.66 | 2.17 | 26.43 | 100 | 24.37 | 34.96 | 1.10 | 23.53 | 437 | 0.55 |
| 205 | 10.72 | 34.77 | 2.42 | 26.67 | 150 | 12.65 | 34.67 | 2.09 | 26.23 | 180 | 0.70 |
| 245 | 10.29 | 34.77 | 2.54 | 26.74 | 200 | 10.75 | 34.77 | 2.41 | 26.66 | 139 | 0.79 |
| 287 | 10.03 | 34.76 | 2.54 | 26.78 | 250 | 10.26 | 34.77 | 2.54 | 26.75 | 131 | 0.86 |
| 331 | 9.54 | 34.70 | 2.60 | 26.81 | 300 | 9.88 | 34.75 | 2.55 | 26.80 | 126 | 0.92 |
| 375 | 9.30 | 34.69 | 2.71 | 26.85 | 400 | 9.08 | 34.68 | 2.73 | 26.88 | 119 | 1.05 |
| 422 | 8.94 | 34.68 | 2.73 | 26.90 | | | | | | | |
| HUGH M. SMITH; May 31, 1952; 0310 GCT; 3°09'N, 139°53'W; wind, 180°, 4 kt; weather, partly cloudy; sea, slight; wire angle, 35°. | | | | | | | | | | | 8 |
| 0 | 27.38 | 34.96 | 0.60 | 22.59 | 0 | 27.38 | 34.96 | 0.60 | 22.59 | 527 | 0.00 |
| 8 | 27.36 | 34.96 | 0.60 | 22.60 | 10 | 27.30 | 34.96 | 0.61 | 22.61 | 524 | 0.05 |
| 21 | 27.10 | 34.97 | 0.64 | 22.69 | 20 | 27.10 | 34.97 | 0.64 | 22.68 | 518 | 0.10 |
| 40 | 27.06 | 34.98 | 0.67 | 22.70 | 30 | 27.08 | 34.98 | 0.64 | 22.70 | 516 | 0.16 |
| 76 | 26.93 | 35.06 | 0.66 | 22.81 | 50 | 27.01 | 35.03 | 0.68 | 22.76 | 511 | 0.26 |
| 103 | 17.38 | 34.81 | 1.64 | 25.29 | 75 | 26.94 | 35.06 | 0.67 | 22.80 | 506 | 0.39 |
| 127 | 13.20 | 34.93 | 2.12 | 26.32 | 100 | 18.40 | 34.83 | 1.51 | 25.06 | 291 | 0.49 |
| 155 | 12.26 | 34.91 | 2.30 | 26.49 | 150 | 12.35 | 34.91 | 2.29 | 26.47 | 157 | 0.60 |
| 186 | 11.82 | 34.86 | 2.32 | 26.53 | 200 | 11.68 | 34.85 | 2.34 | 26.55 | 149 | 0.68 |
| 217 | 11.48 | 34.83 | 2.37 | 26.57 | 250 | 11.19 | 34.79 | 2.35 | 26.60 | 145 | 0.76 |
| 253 | 11.16 | 34.79 | 2.35 | 26.60 | 300 | 10.68 | 34.77 | 2.41 | 26.67 | 138 | 0.83 |
| 288 | 10.88 | 34.79 | 2.41 | 26.65 | 400 | (9.18) | (34.67) | | (26.85) | (121) | (0.97) |
| 325 | 10.19 | 34.71 | 2.37 | 26.71 | | | | | | | |
| HUGH M. SMITH; May 31, 1952; 1210 GCT; 1°57'N, 140°03'W; wind, 110°, 4 kt; weather, partly cloudy; sea, slight; wire angle, 05°. | | | | | | | | | | | 9 |
| 0 | 27.13 | 35.00 | 0.71 | 22.70 | 0 | 27.13 | 35.00 | 0.71 | 22.70 | 516 | 0.00 |
| 10 | 27.12 | 35.00 | 0.78 | 22.70 | 10 | 27.12 | 35.00 | 0.78 | 22.70 | 516 | 0.05 |
| 25 | 26.97 | 35.03 | 0.79 | 22.77 | 20 | 27.02 | 35.02 | 0.78 | 22.75 | 512 | 0.10 |
| 50 | 26.46 | 35.13 | 0.85 | 23.01 | 30 | 26.88 | 35.04 | 0.79 | 22.81 | 506 | 0.15 |
| 98a) | 16.55 | 34.81 | 1.76 | 25.49 | 50 | 26.46 | 35.13 | 0.85 | 23.01 | 487 | 0.25 |
| 146 | 12.98 | 34.86 | 2.07 | 26.31 | 75 | 22.40 | 34.93 | 1.24 | 24.07 | 385 | 0.36 |
| 192 | 12.46 | 34.91 | 2.40 | 26.45 | 100 | 16.20 | 34.81 | 1.78 | 25.57 | 242 | 0.44 |
| 240 | 11.48 | 34.87 | 2.47 | 26.60 | 150 | 12.90 | 34.86 | 2.08 | 26.32 | 171 | 0.55 |
| 289 | 11.00 | 34.84 | 2.47 | 26.67 | 200 | 12.38 | 34.91 | 2.40 | 26.46 | 158 | 0.63 |
| 338 | 10.35 | 34.77 | 2.55 | 26.73 | 250 | 11.39 | 34.86 | 2.46 | 26.61 | 143 | 0.71 |
| 387 | 9.79 | 34.76 | 2.69 | 26.82 | 300 | 10.83 | 34.82 | 2.49 | 26.68 | 136 | 0.78 |
| 430 | 9.12 | 34.70 | 2.79 | 26.89 | 400 | 9.60 | 34.73 | 2.73 | 26.91 | 116 | 0.92 |
| 488 | 8.44 | 34.69 | 2.89 | 26.98 | | | | | | | |

a) Depth uncertain because of erratic unprotected thermometer.

HBL

HMS-15

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **10** | HUGH M. SMITH; May 31, 1952; 2113 GCT; 0°53'N, 140°02'W; wind, 120°, 5 kt; weather, partly cloudy; sea, slight; wire angle, 43°. | | | | | | | | | | |
| 0 | 26.42 | 35.17 | 0.70 | 23.05 | 0 | 26.42 | 35.17 | 0.70 | 23.05 | 483 | 0.00 |
| 8 | 26.24 | 35.17 | 0.67 | 23.11 | 10 | 26.20 | 35.17 | 0.68 | 23.12 | 476 | 0.05 |
| 18 | 26.01 | 35.18 | 0.73 | 23.18 | 20 | 25.98 | 35.19 | 0.73 | 23.20 | 468 | 0.10 |
| 34 | 25.63 | 35.22 | 0.72 | 23.34 | 30 | 25.72 | 35.22 | 0.72 | 23.31 | 458 | 0.14 |
| 67 | 23.89 | 35.08 | 0.91 | 23.75 | 50 | 25.20 | 35.19 | 0.77 | 23.37 | 452 | 0.23 |
| 103 | 18.94 | 35.01 | 1.05 | 25.06 | 75 | 22.30 | 35.03 | 0.93 | 24.18 | 375 | 0.34 |
| 144 | 14.29 | 34.93 | 1.48 | 26.09 | 100 | 19.30 | 35.01 | 1.03 | 24.97 | 300 | 0.42 |
| 187 | 12.45 | - | 1.82 | | 150 | 13.92 | 34.92 | 1.52 | 26.16 | 186 | 0.54 |
| 233 | 11.88 | 34.86 | 1.98 | 26.52 | 200 | 12.28 | 34.87 | 1.86 | 26.45 | 159 | 0.63 |
| 279 | 11.56 | 34.87 | 2.21 | 26.59 | 250 | 11.79 | 34.87 | 2.05 | 26.55 | 150 | 0.71 |
| 326 | 10.78 | 34.83 | 2.34 | 26.70 | 300 | 11.22 | 34.85 | 2.29 | 26.64 | 141 | 0.79 |
| 375 | 9.68 | 34.78 | 2.29 | 26.85 | 400 | 9.25 | 34.74 | 2.39 | 26.89 | 116 | 0.93 |
| 423 | 8.94 | 34.70 | 2.55 | 26.91 | | | | | | | |
| **11** | HUGH M. SMITH; June 1, 1952; 0618 GCT; 0°11'S, 139°52'W; wind, 090°, 6 kt; weather, rain showers; sea, slight; wire angle, 35°. | | | | | | | | | | |
| 0 | 26.24 | 35.34 | 0.80 | 23.23 | 0 | 26.24 | 35.34 | 0.80 | 23.23 | 465 | 0.00 |
| 9 | 26.12 | 35.35 | 0.83 | 23.28 | 10 | 26.12 | 35.35 | 0.83 | 23.28 | 461 | 0.05 |
| 21 | 25.71 | 35.34 | 0.82 | 23.40 | 20 | 25.73 | 35.34 | 0.82 | 23.39 | 450 | 0.09 |
| 42 | 25.56 | 35.46 | 0.90 | 23.54 | 30 | 25.66 | 35.35 | 0.84 | 23.42 | 447 | 0.14 |
| 86 | 23.46 | 35.70 | 1.14 | 24.35 | 50 | 25.55 | 35.44 | 0.89 | 23.52 | 437 | 0.23 |
| 131 | 17.46 | 35.33 | 1.44 | 25.67 | 75 | 24.48 | 35.65 | 1.06 | 24.01 | 391 | 0.33 |
| 179 | 13.70 | 34.98 | 1.71 | 26.25 | 100 | 21.68 | 35.64 | 1.23 | 24.81 | 315 | 0.42 |
| 226 | 12.36 | 34.95 | 2.07 | 26.49 | 150 | 15.28 | 35.13 | 1.57 | 26.03 | 199 | 0.55 |
| 274 | 11.55 | 34.88 | 2.38 | 26.60 | 200 | 13.18 | 34.97 | 1.81 | 26.35 | 168 | 0.64 |
| 322 | 10.90 | 34.83 | 2.44 | 26.68 | 250 | 11.98 | 34.91 | 2.25 | 26.54 | 150 | 0.73 |
| 370 | 9.87 | 34.75 | 2.54 | 26.80 | 300 | 11.19 | 34.85 | 2.41 | 26.64 | 141 | 0.80 |
| 420 | 9.12 | 34.71 | 2.73 | 26.89 | 400 | 9.40 | 34.72 | 2.66 | 26.85 | 121 | 0.94 |
| 469 | 8.18 | 34.65 | 2.91 | 26.99 | | | | | | | |
| **12** | HUGH M. SMITH; June 1, 1952; 1349 GCT; 1°02'S, 139°52'W; wind, 090°, 20 kt; weather, moderate rain; sea, moderate; wire angle, 48°. | | | | | | | | | | |
| 0 | 26.40 | 35.53 | 0.71 | 23.33 | 0 | 26.60 | 35.52 | 0.71 | 23.26 | 463 | 0.00 |
| 8 | 26.60 | 35.52 | 0.77 | 23.26 | 10 | 26.59 | 35.52 | 0.74 | 23.26 | 463 | 0.05 |
| 18 | 26.58 | 35.52 | 0.76 | 23.26 | 20 | 26.55 | 35.52 | 0.76 | 23.28 | 461 | 0.09 |
| 34 | 26.39 | 35.53 | 0.72 | 23.33 | 30 | 26.42 | 35.53 | 0.73 | 23.32 | 457 | 0.14 |
| 67a) | 25.32 | 35.60 | 0.87 | 23.72 | 50 | 26.20 | 35.54 | 0.74 | 23.40 | 450 | 0.23 |
| 98 | 21.29 | 35.78 | 1.17 | 25.03 | 75 | 23.85 | 35.70 | 0.98 | 23.48 | 442 | 0.33 |
| 131 | 16.92 | 35.44 | 1.52 | 25.89 | 100 | 21.00 | 35.78 | 1.20 | 25.10 | 287 | 0.42 |
| 168 | 13.24 | 35.07 | 1.83 | 26.42 | 150 | 14.25 | 35.18 | 1.73 | 26.29 | 174 | 0.53 |
| 206 | 12.06 | 34.92 | 2.07 | 26.54 | 200 | 12.15 | 34.93 | 2.03 | 26.52 | 152 | 0.62 |
| 247a) | 11.84 | 34.90 | 2.12 | 26.56 | 250 | 11.80 | 34.90 | 2.12 | 26.56 | 148 | 0.70 |
| 292 | 11.34 | 34.88 | 2.12 | 26.64 | 300 | 11.23 | 34.87 | 2.14 | 26.65 | 140 | 0.77 |
| 338 | 10.58 | 34.83 | 2.27 | 26.74 | 400 | (9.40) | (34.76) | | (26.88) | (118) | (0.91) |
| 386 | 9.75 | 34.78 | 2.32 | 26.84 | | | | | | | |

a) Depth uncertain because of erratic unprotected thermometer.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| HUGH M. SMITH; June 1, 1952; 2128 GCT; 2°00'S, 139°50'W; wind, 100°, 12 kt; weather, partly cloudy; sea, rough; wire angle, 35°. | | | | | | | | | | | 13 |
| 0 | 27.40 | 35.43 | 0.80 | 22.93 | 0 | 27.40 | 35.43 | 0.80 | 22.93 | 494 | 0.00 |
| 9 | 27.36 | (35.44) | 0.82 | (22.95) | 10 | 27.35 | 35.44 | 0.82 | 22.96 | 492 | 0.05 |
| 20 | 27.28 | 35.43 | 0.83 | 22.97 | 20 | 27.28 | 35.43 | 0.83 | 22.97 | 490 | 0.10 |
| 40 | 27.26 | 35.43 | 0.83 | 22.98 | 30 | 27.27 | 35.43 | 0.83 | 22.98 | 490 | 0.15 |
| 80 | 21.28 | 35.62 | 1.31 | 24.91 | 50 | 27.20 | 35.44 | 0.84 | 23.01 | 487 | 0.25 |
| 119 | 14.08 | 35.07 | 2.40 | 26.24 | 75 | 23.00 | 35.68 | 1.12 | 24.47 | 347 | 0.35 |
| 159 | 12.53 | 34.96 | 2.48 | 26.47 | 100 | 16.80 | 35.33 | 2.06 | 25.83 | 218 | 0.42 |
| 200 | 12.26 | - a) | 2.52 | | 150 | 12.61 | 34.95 | 2.46 | 26.45 | 159 | 0.52 |
| 240 | 11.95 | 34.90 | 2.62 | 26.54 | 200 | 12.26 | 34.93 | 2.52 | 26.50 | 154 | 0.60 |
| 282 | 11.62 | 34.87 | 2.58 | 26.58 | 250 | 11.88 | 34.89 | 2.62 | 26.54 | 150 | 0.68 |
| 324 | 11.29 | 34.87 | 2.56 | 26.64 | 300 | 11.50 | 34.87 | 2.57 | 26.60 | 145 | 0.76 |
| 367 | 10.78 | 34.83 | 2.75 | 26.70 | 400 | 9.85 | 34.79 | 2.94 | 26.83 | 123 | 0.90 |
| 409 | 9.47 | 34.78 | 3.04 | 26.89 | | | | | | | |
| HUGH M. SMITH; June 2, 1952; 0500 GCT; 3°00'S, 139°52'W; wind, 110°, 14 kt; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | | 14 |
| 0 | 27.61 | 35.35 | 0.70 | 22.80 | 0 | 27.61 | 35.35 | 0.70 | 22.80 | 506 | 0.00 |
| 10 | 27.60 | 35.19 | 0.66 | 22.70 | 10 | 27.60 | 35.19 | 0.66 | 22.69 | 517 | 0.05 |
| 24 | 27.59 | 35.36 | 0.74 | 22.82 | 20 | 27.60 | 35.36 | 0.72 | 22.82 | 505 | 0.10 |
| 48 | 27.48 | 35.37 | 0.87 | 22.86 | 30 | 27.58 | 35.37 | 0.76 | 22.83 | 504 | 0.15 |
| 95b) | 18.45 | 35.49 | 1.35 | 25.55 | 50 | 27.47 | 35.40 | 0.86 | 22.89 | 498 | 0.25 |
| 142 | 13.10 | 34.96 | 2.27 | 26.36 | 75 | 23.18 | 35.67 | 0.98 | 24.41 | 353 | 0.36 |
| 188 | 12.57 | 34.94 | 2.20 | 26.45 | 100 | 18.25 | 35.47 | 1.38 | 25.59 | 241 | 0.44 |
| 234 | 12.40 | 34.93 | 2.35 | 26.47 | 150 | 13.01 | 34.95 | 2.27 | 26.37 | 167 | 0.54 |
| 281 | 12.04 | 34.94 | 2.57 | 26.55 | 200 | 12.51 | 34.94 | 2.20 | 26.46 | 158 | 0.62 |
| 328 | 11.04 | 34.86 | 2.57 | 26.68 | 250 | 12.32 | 34.93 | 2.44 | 26.49 | 155 | 0.70 |
| 376 | 10.10 | 34.79 | 2.77 | 26.79 | 300 | 11.78 | 34.92 | 2.57 | 26.59 | 146 | 0.78 |
| 424 | 9.15 | 34.73 | 2.85 | 26.90 | 400 | 9.65 | 34.76 | 2.82 | 26.84 | 122 | 0.93 |
| 473 | 8.16 | 34.67 | 2.86 | 27.01 | | | | | | | |
| HUGH M. SMITH; June 2, 1952; 1333, 1350 GCT; 4°00'S, 140°05'W; wind, 090°, 14 kt; weather, partly cloudy; sea, moderate; wire angle, 38°, 40°. | | | | | | | | | | | 15 |
| 0 | 27.66 | 35.33 | 0.66 | 22.77 | 0 | 27.66 | 35.33 | 0.66 | 22.77 | 509 | 0.00 |
| 8 | 27.64 | 35.34 | 0.76 | 22.79 | 10 | 27.63 | 35.33 | 0.76 | 22.78 | 508 | 0.05 |
| 19 | 27.66 | 35.31 | 0.72 | 22.76 | 20 | 27.66 | 35.31 | 0.72 | 22.76 | 510 | 0.10 |
| 37 | 27.65 | 34.97 | 0.73 | 22.51 | 30 | 27.66 | 35.10 | 0.73 | 22.60 | 526 | 0.15 |
| 73 | 24.54 | 35.66 | 1.00 | 24.00 | 50 | 27.59 | 35.32 | 0.74 | 22.79 | 508 | 0.26 |
| 108 | 14.84 | 35.12 | 2.14 | 26.12 | 75 | 23.60 | 35.67 | 1.06 | 23.53 | 437 | 0.37 |
| 143 | 13.00 | 34.98 | 2.42 | 26.39 | 100 | 15.99 | 35.22 | 1.93 | 25.95 | 208 | 0.44 |
| 180 | 12.64 | 34.96 | 2.35 | 26.45 | 150 | 12.93 | 34.98 | 2.42 | 26.41 | 163 | 0.53 |
| 217 | 12.38 | 34.94 | 2.47 | 26.49 | 200 | 12.48 | 34.95 | 2.38 | 26.47 | 156 | 0.62 |
| | | | | | 250 | 12.18 | 34.93 | 2.53 | 26.52 | 152 | 0.70 |
| 256 | 12.12 | 34.93 | 2.56 | 26.53 | 300 | 11.65 | 34.89 | 2.70 | 26.59 | 146 | 0.78 |
| 295 | 11.74 | 34.90 | 2.71 | 26.58 | 400 | (9.40) | (34.80) | | (26.92) | (115) | (0.91) |
| 335 | 10.76 | 34.83 | 2.84 | 26.70 | | | | | | | |
| 376 | 9.91 | 34.80 | 2.88 | 26.83 | | | | | | | |

a) Sample lost.
b) Depth uncertain because of erratic unprotected thermometer.

HBL

HMS-15

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **16** | HUGH M. SMITH; June 3, 1952; 0504 GCT; 5°30'S, 139°57'W; wind, 100°, 8 kt; weather, partly cloudy; sea, slight; wire angle, 30°. | | | | | | | | | | |
| 0 | 27.93 | 34.94 | 0.61 | 22.39 | 0 | 27.93 | 34.94 | 0.61 | 22.39 | 545 | 0.00 |
| 8 | 27.93 | 34.95 | 0.62 | 22.40 | 10 | 27.93 | 34.95 | 0.62 | 22.40 | 545 | 0.05 |
| 22 | 27.91 | 34.92 | 0.60 | 22.38 | 20 | 27.92 | 34.92 | 0.60 | 22.38 | 547 | 0.11 |
| 39 | 27.87 | 34.92 | 0.61 | 22.40 | 30 | 27.89 | 34.92 | 0.60 | 22.39 | 546 | 0.16 |
| 73 | 26.71 | 35.60 | 0.73 | 23.28 | 50 | 27.86 | 34.92 | 0.61 | 22.78 | 509 | 0.27 |
| 99 | 25.21 | 35.78 | 0.78 | 23.88 | 75 | 26.68 | 35.60 | 0.73 | 23.29 | 460 | 0.40 |
| 123 | 19.52 | 35.91 | 1.00 | 25.60 | 100 | 25.05 | 35.79 | 0.79 | 23.94 | 398 | 0.51 |
| 150a) | 15.83 | 35.27 | 1.65 | 26.01 | 150 | 15.83 | 35.27 | 1.65 | 26.01 | 200 | 0.66 |
| 174 | 13.66 | 35.08 | 2.02 | 26.34 | 200 | 12.73 | 35.02 | 2.00 | 26.47 | 157 | 0.75 |
| 202 | 12.64 | 35.01 | 2.00 | 26.49 | 250 | 11.90 | 34.94 | 2.07 | 26.58 | 146 | 0.83 |
| 232 | 12.22 | 34.96 | 2.05 | 26.53 | 300 | (10.85) | (34.87) | (2.25) | (26.70) | (135) | (0.90) |
| 265 | 11.65 | 34.93 | 2.10 | 26.62 | 400 | (9.28) | (34.75) | | (26.90) | (116) | (1.04) |
| 298a) | 10.44 | 34.84 | 2.36 | 26.77 | | | | | | | |
| **17** | HUGH M. SMITH; June 3, 1952; 1545 GCT; 7°00'S, 139°58'W; wind, 180°, 2 kt; weather, intermittent moderate rain; sea, slight; wire angle, 18°. | | | | | | | | | | |
| 1 | 28.04 | 35.05 | 0.77 | 22.44 | 0 | (28.04) | (35.05) | (0.77) | (22.44) | (541) | (0.00) |
| 10 | 28.01 | 35.05 | 0.72 | 22.45 | 10 | 28.01 | 35.05 | 0.72 | 22.45 | 540 | 0.05 |
| 24 | 28.02 | 35.05 | 0.67 | 22.45 | 20 | 28.02 | 35.05 | 0.68 | 22.45 | 540 | 0.11 |
| 47 | 28.02 | 35.04 | 0.72 | 22.44 | 30 | 28.02 | 35.05 | 0.70 | 22.45 | 540 | 0.16 |
| 94 | 27.17 | 35.90 | 0.82 | 23.36 | 50 | 28.02 | 35.04 | 0.72 | 22.44 | 541 | 0.27 |
| 138 | 22.04 | 36.15 | 0.84 | 25.10 | 75 | 28.08 | 35.10 | 0.73 | 22.47 | 538 | 0.41 |
| 182 | 17.28 | 35.36 | 1.28 | 25.74 | 100 | 26.60 | 35.97 | 0.83 | 22.84 | 502 | 0.53 |
| 226 | 13.42 | 35.02 | 2.28 | 26.34 | 150 | 20.40 | 35.94 | 0.90 | 25.01 | 296 | 0.70 |
| 269 | 11.26 | 34.83 | 2.21 | 26.61 | 200 | 15.60 | 35.22 | 1.77 | 26.03 | 199 | 0.82 |
| 313 | 10.33 | 34.80 | 2.29 | 26.76 | 250 | 12.08 | 34.92 | 2.21 | 26.53 | 151 | 0.91 |
| 357 | 9.48 | 34.71 | 2.37 | 26.83 | 300 | 10.59 | 34.81 | 2.25 | 26.72 | 133 | 0.99 |
| 402 | 8.71 | 34.70 | 2.36 | 26.95 | 400 | 8.78 | 34.70 | 2.36 | 26.94 | 113 | 1.12 |
| 448 | 7.95 | 34.64 | 2.50 | 27.02 | | | | | | | |
| **18** | HUGH M. SMITH; June 4, 1952; 0424 GCT; 5°26'S, 140°00'W; wind, 090°, 10 kt; weather, cloudy; sea, slight; wire angle, 28°. | | | | | | | | | | |
| 0 | 28.03 | 34.95 | 0.59 | 22.37 | 0 | 28.03 | 34.95 | 0.59 | 22.37 | 548 | 0.00 |
| 9 | 27.91 | 34.91 | 0.58 | 22.38 | 10 | 27.90 | 34.91 | 0.58 | 22.38 | 547 | 0.05 |
| 22 | 27.80 | 34.94 | 0.60 | 22.44 | 20 | 27.82 | 34.92 | 0.59 | 22.42 | 543 | 0.11 |
| 43 | 27.78 | 34.94 | 0.58 | 22.44 | 30 | 27.80 | 34.94 | 0.60 | 22.44 | 541 | 0.16 |
| 85 | 25.98 | 35.73 | 0.78 | 23.61 | 50 | 27.80 | 34.96 | 0.59 | 22.45 | 540 | 0.27 |
| 123 | 20.56 | 35.73 | 1.06 | 25.18 | 75 | 26.90 | 35.58 | 0.73 | 23.21 | 468 | 0.40 |
| 161 | 15.40 | 35.21 | 1.91 | 26.06 | 100 | 24.00 | 35.79 | 0.85 | 24.26 | 367 | 0.50 |
| 200 | 12.72 | 34.99 | 2.22 | 26.46 | 150 | 16.60 | 35.33 | 1.71 | 25.88 | 213 | 0.65 |
| 241 | 12.05 | 34.96 | 2.17 | 26.57 | 200 | 12.72 | 34.99 | 2.22 | 26.46 | 158 | 0.75 |
| 285 | 11.31 | 34.90 | 2.20 | 26.66 | 250 | 11.90 | 34.95 | 2.16 | 26.59 | 146 | 0.83 |
| 330 | 10.45 | 34.82 | 2.52 | 26.75 | 300 | 11.03 | 34.88 | 2.26 | 26.69 | 136 | 0.90 |
| 375 | 9.76 | 34.77 | 2.85 | 26.83 | 400 | 9.40 | 34.76 | 2.85 | 26.88 | 118 | 1.04 |
| 421 | 9.08 | 34.76 | 2.85 | 26.94 | | | | | | | |

a) Depth uncertain because of erratic unprotected thermometer.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| HUGH M. SMITH; June 4, 1952; 1536, 1553 GCT; 3°52'S, 140°04'W; wind, 160°, 8 kt; weather, cloudy; sea, slight; wire angle, 13°, 15°. | | | | | | | | | | | 19 |
| 0 | 27.72 | 35.33 | 0.79 | 22.76 | 0 | 27.72 | 35.33 | 0.79 | 22.76 | 511 | 0.00 |
| 10 | 27.69 | 35.35 | 0.82 | 22.78 | 10 | 27.69 | 35.35 | 0.82 | 22.78 | 508 | 0.05 |
| 24 | 27.64 | 35.35 | 0.86 | 22.79 | 20 | 27.66 | 35.35 | 0.84 | 22.79 | 508 | 0.10 |
| 48 | 27.60 | 35.31 | 0.80 | 22.78 | 30 | 27.62 | 35.33 | 0.86 | 22.78 | 508 | 0.15 |
| 96 | 15.41 | 35.19 | 2.08 | 26.05 | 50 | 27.60 | 35.31 | 0.80 | 22.78 | 509 | 0.25 |
| | | | | | 75 | 20.90 | 35.65 | 1.14 | 25.03 | 294 | 0.36 |
| 144 | 13.04 | 35.01 | 2.48 | 26.41 | 100 | 15.08 | 35.16 | 2.14 | 26.10 | 192 | 0.42 |
| 191 | 12.68 | - | 2.36 | | 150 | 12.99 | 35.01 | 2.44 | 26.42 | 162 | 0.50 |
| 239 | 12.43 | 34.96 | 2.67 | 26.49 | 200 | 12.64 | 34.98 | 2.40 | 26.47 | 157 | 0.58 |
| 286 | 12.12 | 34.93 | 2.75 | 26.53 | 250 | 12.39 | 34.95 | 2.68 | 26.49 | 155 | 0.66 |
| 333 | 11.60 | 34.91 | 2.83 | 26.61 | 300 | 12.00 | 34.92 | 2.77 | 26.54 | 150 | 0.74 |
| 381 | 10.61 | 34.84 | 2.94 | 26.74 | 400 | 10.10 | 34.80 | 3.01 | 26.80 | 126 | 0.89 |
| 431 | 9.30 | 34.74 | 3.11 | 26.89 | | | | | | | |
| 482 | 8.66 | 34.73 | 3.14 | 26.98 | | | | | | | |
| HUGH M. SMITH; June 4, 1952; 2353 GCT; 2°50'S, 140°06'W; wind, 070°, 10 kt; weather, cloudy; sea, slight; wire angle, missing. | | | | | | | | | | | 20 |
| 0 | 27.93 | 35.36 | 0.64 | 22.71 | 0 | 27.93 | 35.36 | 0.64 | 22.71 | 515 | 0.00 |
| 10 | 27.64 | 35.36 | 0.62 | 22.80 | 10 | 27.64 | 35.36 | 0.62 | 22.81 | 505 | 0.05 |
| 25 | 27.58 | 35.35 | 0.67 | 22.81 | 20 | 27.59 | 35.35 | 0.66 | 22.81 | 505 | 0.10 |
| 49 | 27.55 | 35.37 | 0.64 | 22.84 | 30 | 27.57 | 35.35 | 0.65 | 22.82 | 504 | 0.15 |
| 96a) | 16.76 | 35.31 | 1.66 | 25.82 | 50 | 27.55 | 35.37 | 0.64 | 22.84 | 503 | 0.25 |
| 143 | 12.88 | 34.97 | 2.06 | 26.41 | 75 | 22.38 | 35.61 | 1.06 | 24.59 | 336 | 0.36 |
| 190 | 12.52 | 34.94 | 2.29 | 26.46 | 100 | 16.00 | 35.25 | 1.71 | 25.96 | 206 | 0.43 |
| 237 | 12.32 | 34.91 | 2.36 | 26.48 | 150 | 12.81 | 34.96 | 2.08 | 26.42 | 162 | 0.52 |
| 283 | 11.91 | 34.90 | 2.59 | 26.55 | 200 | 12.48 | 34.94 | 2.30 | 26.47 | 157 | 0.60 |
| 331 | 11.08 | 34.84 | 2.63 | 26.65 | 250 | 12.20 | 34.92 | 2.43 | 26.51 | 153 | 0.68 |
| 378 | 9.88 | 34.77 | 2.83 | 26.81 | 300 | 11.62 | 34.89 | 2.61 | 26.59 | 145 | 0.76 |
| 425 | 8.92 | 34.73 | 2.84 | 26.94 | 400 | 9.39 | 34.75 | 2.84 | 26.88 | 118 | 0.90 |
| 474 | 7.94 | 34.67 | 2.89 | 27.04 | | | | | | | |
| HUGH M. SMITH; June 5, 1952; 0720 GCT; 1°46'S, 140°09'W; wind, 040°, 13 kt; weather, partly cloudy; sea, slight; wire angle, 21°. | | | | | | | | | | | 21 |
| 0 | 27.19 | 35.48 | 0.87 | 23.04 | 0 | 27.19 | 35.48 | 0.87 | 23.04 | 484 | 0.00 |
| 10 | 27.18 | 35.52 | 0.83 | 23.07 | 10 | 27.18 | 35.52 | 0.83 | 23.07 | 480 | 0.05 |
| 23 | 27.10 | 35.48 | 0.83 | 23.07 | 20 | 27.13 | 35.48 | 0.83 | 23.06 | 482 | 0.10 |
| 47 | 26.92 | 35.48 | 0.86 | 23.13 | 30 | 27.08 | 35.48 | 0.83 | 23.07 | 480 | 0.14 |
| 92 | 17.02 | 35.31 | 1.86 | 25.76 | 50 | 26.86 | 35.48 | 0.86 | 23.15 | 474 | 0.24 |
| 137 | 12.97 | 34.97 | 2.47 | 26.39 | 75 | 25.80 | 35.52 | 0.91 | 23.51 | 439 | 0.36 |
| 181 | 12.60 | 34.95 | 2.76 | 26.45 | 100 | 16.00 | 35.22 | 2.01 | 25.93 | 208 | 0.44 |
| 225 | 12.17 | 34.92 | 2.64 | 26.51 | 150 | 12.86 | 34.96 | 2.56 | 26.41 | 163 | 0.53 |
| 271 | 11.76 | 34.90 | 2.61 | 26.57 | 200 | 12.42 | 34.94 | 2.71 | 26.48 | 156 | 0.61 |
| 318 | 11.04 | 34.86 | 2.57 | 26.68 | 250 | 11.92 | 34.91 | 2.62 | 26.55 | 149 | 0.69 |
| 364 | 10.00 | 34.82 | 2.86 | 26.83 | 300 | 11.39 | 34.88 | 2.58 | 26.63 | 142 | 0.77 |
| 411 | 8.86 | 34.72 | 3.01 | 26.94 | 400 | 9.17 | 34.74 | 2.99 | 26.91 | 116 | 0.91 |
| 459 | 8.12 | 34.70 | 2.95 | 27.04 | | | | | | | |

a) Depth uncertain because of erratic unprotected thermometer.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **22** | HUGH M. SMITH; June 5, 1952; 1537 GCT; 0°43'S, 140°11'W; wind, 050°, 11 kt; weather, partly cloudy; sea, slight; wire angle, 28°. | | | | | | | | | | |
| 0 | 26.38 | 35.49 | 0.69 | 23.30 | 0 | 26.38 | 35.49 | 0.69 | 23.30 | 459 | 0.00 |
| 9 | 26.40 | 35.50 | 0.68 | 23.30 | 10 | 26.40 | 35.50 | 0.68 | 23.30 | 458 | 0.05 |
| 22 | 26.39 | 35.51 | 0.72 | 23.32 | 20 | 26.39 | 35.51 | 0.72 | 23.31 | 457 | 0.09 |
| 44 | 26.25 | 35.53 | 0.71 | 23.37 | 30 | 26.33 | 35.52 | 0.72 | 23.34 | 455 | 0.14 |
| 88 | 19.99 | 35.61 | 1.27 | 25.24 | 50 | 26.12 | 35.54 | 0.73 | 23.42 | 447 | 0.23 |
| 131 | 15.09 | 35.21 | 1.66 | 26.13 | 75 | 22.00 | 35.76 | 1.13 | 24.81 | 314 | 0.32 |
| 174 | 12.64 | 34.97 | 2.12 | 26.46 | 100 | 19.20 | 35.55 | 1.31 | 25.41 | 258 | 0.40 |
| 217 | 12.05 | 34.89 | 2.30 | 26.51 | 150 | 13.79 | 35.08 | 1.88 | 26.31 | 172 | 0.51 |
| 260 | 11.81 | 34.88 | 2.23 | 26.55 | 200 | 12.25 | 34.91 | 2.28 | 26.49 | 155 | 0.59 |
| 305 | 11.42 | 34.86 | 2.18 | 26.61 | 250 | 11.88 | 34.88 | 2.25 | 26.54 | 151 | 0.67 |
| 350 | 10.76 | 34.82 | 2.26 | 26.70 | 300 | 11.48 | 34.86 | 2.18 | 26.59 | 145 | 0.75 |
| 396 | 9.58 | 34.74 | 2.33 | 26.84 | 400 | 9.42 | 34.73 | 2.34 | 26.86 | 120 | 0.89 |
| 451 | 8.17 | 34.66 | 2.63 | 27.00 | | | | | | | |
| **23** | HUGH M. SMITH; June 5, 1952; 2207 GCT; 0°00', 139°59'W; wind, 070°, 11 kt; weather, partly cloudy; sea, moderate; wire angle, 35°. | | | | | | | | | | |
| 0 | 26.20 | 35.46 | 0.70 | 23.34 | 0 | 26.20 | 35.46 | 0.70 | 23.34 | 455 | 0.00 |
| 8 | 26.18 | 35.48 | 0.84 | 23.36 | 10 | 26.17 | 35.47 | 0.85 | 23.35 | 454 | 0.05 |
| 20 | 26.00 | 35.45 | 0.95 | 23.39 | 20 | 26.00 | 35.45 | 0.95 | 23.39 | 450 | 0.09 |
| 41 | 25.74 | 35.57 | 1.03 | 23.56 | 30 | 25.88 | 35.47 | 0.99 | 23.45 | 445 | 0.14 |
| 83a) | 22.34 | 35.77 | 1.26 | 24.72 | 50 | 25.42 | 35.61 | 1.07 | 23.69 | 422 | 0.22 |
| 126 | 16.92 | 35.27 | 1.49 | 25.76 | 75 | 22.52 | 35.62 | 1.25 | 24.56 | 338 | 0.32 |
| 171 | 13.41 | 35.02 | 1.80 | 26.34 | 100 | 20.40 | 35.62 | 1.33 | 25.14 | 283 | 0.40 |
| 215 | 12.52 | 34.95 | 2.09 | 26.47 | 150 | 14.95 | 35.12 | 1.65 | 26.09 | 193 | 0.52 |
| 265 | 11.84 | 34.88 | 2.26 | 26.55 | 200 | 12.81 | 34.98 | 1.97 | 26.43 | 160 | 0.61 |
| 311 | 11.12 | 34.83 | 2.29 | 26.64 | 250 | 12.05 | 34.90 | 2.22 | 26.52 | 152 | 0.69 |
| 361 | 10.24 | 34.79 | 2.54 | 26.77 | 300 | 11.32 | 34.84 | 2.29 | 26.61 | 144 | 0.77 |
| 408 | 9.02 | 34.73 | 2.70 | 26.92 | 400 | 9.26 | 34.74 | 2.67 | 26.89 | 117 | 0.91 |
| 459 | 8.04 | 34.67 | 3.01 | 27.03 | | | | | | | |
| **24** | HUGH M. SMITH; June 6, 1952; 0733 GCT; 1°02'N, 139°58'W; wind, 090°, 14 kt; weather, partly cloudy; sea, moderate; wire angle, 30°. | | | | | | | | | | |
| 0 | 25.90 | 35.18 | 0.69 | 23.22 | 0 | 25.90 | 35.18 | 0.69 | 23.22 | 466 | 0.00 |
| 9 | 25.90 | 35.17 | 0.65 | 23.21 | 10 | 25.90 | 35.17 | 0.65 | 23.21 | 467 | 0.05 |
| 22 | 25.70 | 35.18 | 0.68 | 23.28 | 20 | 25.73 | 35.18 | 0.68 | 23.27 | 461 | 0.09 |
| 44 | 25.41 | 35.16 | 0.74 | 23.36 | 30 | 25.60 | 35.17 | 0.71 | 23.31 | 458 | 0.14 |
| 88 | 18.86 | 34.90 | 1.07 | 25.00 | 50 | 25.23 | 35.15 | 0.75 | 23.41 | 449 | 0.23 |
| 133 | 14.10 | 34.94 | 1.44 | 26.14 | 75 | 20.90 | 34.96 | 0.96 | 24.51 | 344 | 0.33 |
| 179 | 12.81 | 34.92 | 1.69 | 26.39 | 100 | 17.45 | 34.90 | 1.16 | 25.35 | 264 | 0.41 |
| 225 | 12.06 | 34.90 | 1.94 | 26.52 | 150 | 13.62 | 34.93 | 1.49 | 26.15 | 187 | 0.52 |
| 271 | 11.57 | 34.86 | 2.24 | 26.58 | 200 | 12.52 | 34.91 | 1.78 | 26.44 | 160 | 0.61 |
| 319 | 10.86 | 34.85 | 2.34 | 26.70 | 250 | 11.79 | 34.88 | 2.13 | 26.55 | 149 | 0.69 |
| 367 | 9.77 | 34.74 | 2.39 | 26.81 | 300 | 11.19 | 34.86 | 2.30 | 26.65 | 140 | 0.76 |
| 416 | 9.28 | 34.72 | 2.50 | 26.87 | 400 | 9.46 | 34.73 | 2.46 | 26.85 | 121 | 0.90 |
| 466 | 8.45 | 34.68 | 2.63 | 26.97 | | | | | | | |

a) Depth uncertain because of erratic unprotected thermometer.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |

HUGH M. SMITH; June 6, 1952; 1656 GCT; 2°04'N, 139°57'W; wind, 130°, 14 kt; weather, cloudy; sea, slight; wire angle, 28°. 25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.91 | 35.11 | 0.74 | 22.85 | 0 | 26.91 | 35.11 | 0.74 | 22.85 | 502 | 0.00 |
| 9 | 26.90 | 35.10 | 0.75 | 22.85 | 10 | 26.90 | 35.10 | 0.74 | 22.85 | 502 | 0.05 |
| 23 | 26.89 | 35.10 | 0.75 | 22.85 | 20 | 26.89 | 35.10 | 0.75 | 22.85 | 502 | 0.10 |
| 44 | 26.61 | 35.09 | 0.81 | 22.93 | 30 | 26.91 | 35.10 | 0.76 | 22.86 | 501 | 0.15 |
| 87 | 19.00 | 34.87 | 1.61 | 24.94 | 50 | 26.00 | 35.08 | 0.87 | 23.11 | 477 | 0.25 |
| 127 | 13.10 | 34.81 | 2.13 | 26.24 | 75 | 21.70 | 34.94 | 1.34 | 24.27 | 366 | 0.35 |
| 167 | 12.20 | 34.91 | 2.37 | 26.50 | 100 | 16.15 | 34.80 | 1.85 | 25.58 | 242 | 0.43 |
| 207 | 11.92 | 34.89 | 2.47 | 26.54 | 150 | 12.52 | 34.89 | 2.27 | 26.42 | 162 | 0.53 |
| 248 | 11.74 | 34.88 | 2.46 | 26.56 | 200 | 11.95 | 34.89 | 2.46 | 26.53 | 151 | 0.62 |
| 289 | 11.45 | 34.87 | 2.49 | 26.61 | 250 | 11.75 | 34.88 | 2.46 | 26.56 | 148 | 0.69 |
| 331 | 10.92 | 34.83 | 2.53 | 26.68 | 300 | 11.35 | 34.86 | 2.51 | 26.62 | 143 | 0.77 |
| 375 | 10.24 | 34.78 | 2.48 | 26.76 | 400 | 9.86 | 34.75 | 2.53 | 26.80 | 126 | 0.91 |
| 421 | 9.60 | 34.73 | 2.60 | 26.83 | | | | | | | |

HUGH M. SMITH; June 7, 1952; 0159 GCT; 3°06'N, 140°00'W; wind, 130°, 9 kt; weather, cloudy; sea, slight; wire angle, 23°. 26

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.67 | 34.94 | 0.59 | 22.48 | 0 | 27.67 | 34.94 | 0.59 | 22.48 | 537 | 0.00 |
| 9 | 27.65 | 34.88 | 0.59 | 22.44 | 10 | 27.64 | 34.88 | 0.59 | 22.44 | 541 | 0.05 |
| 22 | 27.45 | 34.90 | 0.57 | 22.52 | 20 | 27.47 | 34.89 | 0.59 | 22.51 | 534 | 0.11 |
| 44 | 26.90 | 35.11 | 0.65 | 22.85 | 30 | 27.05 | 35.07 | 0.63 | 22.77 | 504 | 0.16 |
| 86 | 25.99 | 35.14 | 0.75 | 23.16 | 50 | 26.78 | 35.13 | 0.66 | 22.91 | 496 | 0.26 |
| 128 | 14.42 | 34.86 | 1.90 | 26.01 | 75 | 26.00 | 35.14 | 0.75 | 23.16 | 472 | 0.38 |
| 170 | 12.72 | 34.94 | 2.15 | 26.42 | 100 | 25.20 | 35.12 | 0.86 | 23.39 | 450 | 0.50 |
| 214 | 12.14 | 34.88 | 2.35 | 26.49 | 150 | 13.05 | 34.94 | 2.07 | 26.35 | 168 | 0.66 |
| 257 | 11.63 | 34.87 | 2.36 | 26.57 | 200 | 12.32 | 34.90 | 2.30 | 26.47 | 157 | 0.74 |
| 301 | 10.98 | 34.81 | 2.38 | 26.65 | 250 | 11.72 | 34.87 | 2.35 | 26.56 | 148 | 0.82 |
| 346 | 10.44 | 34.77 | 2.30 | 26.72 | 300 | 11.00 | 34.81 | 2.38 | 26.65 | 140 | 0.90 |
| 391 | 9.99 | 34.71 | 2.25 | 26.75 | 400 | 9.90 | 34.71 | 2.26 | 26.76 | 129 | 1.04 |
| 437 | 9.51 | 34.71 | 2.38 | 26.83 | | | | | | | |

HUGH M. SMITH; June 7, 1952; 1109 GCT; 4°09'N, 140°06'W; wind, 140°, 11 kt; weather, cloudy; sea, slight; wire angle, 25°. 27

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.04 | 34.66 | 0.58 | 22.15 | 0 | 28.04 | 34.66 | 0.58 | 22.15 | 569 | 0.00 |
| 9 | 28.02 | - | 0.61 | | 10 | 28.02 | 34.68 | 0.60 | 22.18 | 567 | 0.06 |
| 23 | 28.02 | 34.70 | 0.58 | 22.18 | 20 | 28.02 | 34.70 | 0.58 | 22.18 | 566 | 0.11 |
| 45 | 27.82 | 34.81 | 0.62 | 22.33 | 30 | 28.00 | 34.72 | 0.57 | 22.20 | 563 | 0.17 |
| 87 | 25.87 | 34.96 | 0.85 | 23.06 | 50 | 27.79 | 34.82 | 0.61 | 22.35 | 550 | 0.28 |
| 129 | 16.20 | 34.76 | 1.73 | 25.54 | 75 | 26.90 | 34.93 | 0.73 | 22.72 | 514 | 0.42 |
| 171 | 11.46 | 34.64 | 2.17 | 26.43 | 100 | 22.60 | 34.93 | 1.13 | 24.02 | 390 | 0.53 |
| 214 | 10.47 | 34.74 | 2.35 | 26.69 | 150 | 12.80 | 34.66 | 2.06 | 26.19 | 184 | 0.68 |
| 257 | 10.12 | 34.78 | 2.51 | 26.78 | 200 | 10.62 | 34.72 | 2.32 | 26.64 | 140 | 0.76 |
| 301 | 9.92 | 34.77 | 2.45 | 26.81 | 250 | 10.17 | 34.78 | 2.50 | 26.77 | 128 | 0.83 |
| 345 | 9.51 | 34.72 | 2.41 | 26.83 | 300 | 9.93 | 34.77 | 2.45 | 26.80 | 125 | 0.90 |
| 390 | 9.30 | 34.71 | 2.46 | 26.86 | 400 | 9.26 | 34.71 | 2.47 | 26.87 | 119 | 1.03 |
| 436 | 8.90 | 34.69 | 2.69 | 26.91 | | | | | | | |

HBL

HMS-15

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **28** | HUGH M. SMITH; June 7, 1952; 2014 GCT; 5°10'N, 140°12'W; wind, 120°, 13 kt; weather, partly cloudy; sea, slight; wire angle, 15°. | | | | | | | | | | |
| 0 | 27.81 | 34.13 | 0.35 | 21.82 | 0 | 27.81 | 34.13 | 0.35 | 21.82 | 600 | 0.00 |
| 10 | 27.76 | 34.23 | 0.33 | 21.92 | 10 | 27.76 | 34.23 | 0.33 | 21.92 | 591 | 0.06 |
| 25 | 27.84 | 34.58 | 0.38 | 22.15 | 20 | 27.82 | 34.54 | 0.36 | 22.13 | 571 | 0.12 |
| 49 | 27.79 | 34.59 | 0.36 | 22.17 | 30 | 27.83 | 34.58 | 0.37 | 22.15 | 568 | 0.17 |
| 97 | 24.67 | 34.92 | 0.66 | 23.40 | 50 | 27.79 | 34.59 | 0.36 | 22.17 | 566 | 0.29 |
| 145 | 13.07 | 34.65 | 1.95 | 26.13 | 75 | 27.52 | 34.80 | 0.39 | 22.42 | 543 | 0.43 |
| 193 | 10.49 | 34.71 | 2.51 | 26.66 | 100 | 23.60 | 34.92 | 0.74 | 23.72 | 419 | 0.55 |
| 241 | 9.90 | 34.69 | 2.28 | 26.75 | 150 | 12.70 | 34.65 | 2.01 | 26.20 | 182 | 0.70 |
| 289 | 9.53 | 34.70 | 2.60 | 26.82 | 200 | 10.38 | 34.70 | 2.50 | 26.67 | 138 | 0.78 |
| 337 | 9.16 | 34.68 | 2.55 | 26.86 | 250 | 9.81 | 34.69 | 2.29 | 26.76 | 129 | 0.85 |
| 385 | 8.88 | 34.67 | 2.66 | 26.90 | 300 | 9.41 | 34.70 | 2.60 | 26.83 | 122 | 0.92 |
| 433 | 8.53 | 34.65 | 2.74 | 26.94 | 400 | 8.78 | 34.66 | 2.70 | 26.91 | 116 | 1.05 |
| 482 | 8.21 | 34.64 | 2.78 | 26.98 | | | | | | | |
| **29** | HUGH M. SMITH; June 8, 1952; 0340 GCT; 6°07'N, 140°11'W; wind, 120°, 12 kt; weather, heavy rain; sea, slight; wire angle, 04°. | | | | | | | | | | |
| 2 | 28.05 | 34.46 | 0.57 | 22.00 | 0 | (28.06) | (34.46) | (0.57) | (21.99) | (584) | (0.00) |
| 12 | 27.88 | 34.48 | 0.60 | 22.07 | 10 | 27.91 | 34.47 | 0.58 | 22.05 | 579 | 0.06 |
| 27 | 27.80 | 34.56 | 0.52 | 22.15 | 20 | 27.85 | 34.51 | 0.56 | 22.09 | 574 | 0.12 |
| 52 | 27.66 | 34.61 | 0.58 | 22.24 | 30 | 27.79 | 34.58 | 0.57 | 22.17 | 567 | 0.17 |
| 101 | 17.45 | 34.71 | 1.31 | 25.20 | 50 | 27.67 | 34.61 | 0.56 | 22.23 | 561 | 0.29 |
| 150 | 11.80 | 34.68 | 2.57 | 26.40 | 75 | 25.20 | 34.85 | 0.62 | 23.19 | 470 | 0.42 |
| 199 | 10.42 | 34.70 | 2.73 | 26.66 | 100 | 17.60 | 34.72 | 1.29 | 25.17 | 280 | 0.51 |
| 247 | 9.81 | 34.69 | 2.65 | 26.76 | 150 | 11.80 | 34.68 | 2.57 | 26.40 | 164 | 0.62 |
| 295 | 9.40 | 34.66 | 2.68 | 26.81 | 200 | 10.40 | 34.70 | 2.73 | 26.67 | 138 | 0.70 |
| 344 | 9.05 | 34.66 | 2.73 | 26.86 | 250 | 9.79 | 34.70 | 2.65 | 26.77 | 128 | 0.77 |
| 394 | 8.77 | 34.64 | 2.81 | 26.89 | 300 | 9.38 | 34.66 | 2.68 | 26.81 | 125 | 0.84 |
| 443 | 8.32 | 34.62 | 2.88 | 26.95 | 400 | 8.70 | 34.64 | 2.82 | 26.90 | 116 | 0.96 |
| 493 | 8.01 | 34.61 | 2.96 | 26.99 | | | | | | | |
| **30** | HUGH M. SMITH; June 8, 1952; 1224 GCT; 7°04'N, 140°10'W; wind, 060°, 10 kt; weather, slight drizzle; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 2 | 27.34 | 34.50 | 0.37 | 22.25 | 0 | (27.34) | (34.50) | (0.37) | (22.25) | (559) | (0.00) |
| 12 | 27.36 | 34.52 | 0.36 | 22.26 | 10 | 27.36 | 34.52 | 0.36 | 22.26 | 558 | 0.06 |
| 27 | 27.26 | 34.64 | 0.38 | 22.39 | 20 | 27.31 | 34.59 | 0.38 | 22.33 | 551 | 0.11 |
| 51 | 27.11 | 34.72 | 0.38 | 22.50 | 30 | 27.25 | 34.66 | 0.38 | 22.40 | 544 | 0.17 |
| 100 | 12.34 | 34.71 | 2.60 | 26.32 | 50 | 27.15 | 34.71 | 0.38 | 22.47 | 538 | 0.27 |
| 148 | 10.96 | 34.71 | 2.57 | 26.58 | 75 | 14.60 | 34.59 | 2.12 | 25.76 | 224 | 0.37 |
| 196 | 10.25 | 34.71 | 2.58 | 26.70 | 100 | 12.34 | 34.71 | 2.60 | 26.32 | 172 | 0.42 |
| 244 | 9.64 | 34.69 | 2.59 | 26.79 | 150 | 10.92 | 34.71 | 2.57 | 26.58 | 146 | 0.50 |
| 293 | 9.22 | 34.68 | 2.70 | 26.85 | 200 | 10.20 | 34.71 | 2.58 | 26.71 | 134 | 0.57 |
| 341 | 8.86 | 34.64 | 2.71 | 26.88 | 250 | 9.60 | 34.69 | 2.59 | 26.80 | 126 | 0.64 |
| 389 | 8.45 | 34.63 | 2.80 | 26.93 | 300 | 9.20 | 34.68 | 2.70 | 26.85 | 120 | 0.71 |
| 439 | 8.06 | 34.61 | 2.84 | 26.98 | 400 | 8.35 | 34.62 | 2.82 | 26.94 | 112 | 0.83 |
| 490 | 7.62 | 34.59 | 2.86 | 27.03 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |

HUGH M. SMITH; June 8, 1952; 1941 GCT; 8°00'N, 140°00'W; wind, 090°, 12 kt; weather, partly cloudy; sea, moderate; wire angle, 15°. 31

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27.15 | 34.53 | 0.63 | 22.34 | 0 | (27.15) | (34.53) | (0.63) | (22.34) | (551) | (0.00) |
| 11 | 26.96 | 34.53 | 0.59 | 22.40 | 10 | 26.97 | 34.53 | 0.59 | 22.40 | 545 | 0.05 |
| 24 | 26.88 | 34.52 | 0.62 | 22.42 | 20 | 26.90 | 34.53 | 0.62 | 22.42 | 543 | 0.11 |
| 48 | 14.67 | 34.53 | 2.72 | 25.70 | 30 | 26.83 | 34.53 | 0.63 | 22.44 | 541 | 0.16 |
| 97 | 11.94 | 34.78 | 2.98 | 26.45 | 50 | 14.40 | 34.54 | 2.75 | 25.77 | 224 | 0.24 |
| 144 | 11.14 | 34.74 | 3.08 | 26.57 | 75 | 12.70 | 34.72 | 2.91 | 26.25 | 175 | 0.29 |
| 191 | 10.53 | 34.73 | 2.94 | 26.67 | 100 | 11.90 | 34.78 | 2.99 | 26.46 | 158 | 0.33 |
| 237 | 10.04 | 34.71 | 2.93 | 26.74 | 150 | 11.02 | 34.73 | 3.05 | 26.58 | 147 | 0.41 |
| 285 | 9.70 | 34.69 | 3.00 | 26.78 | 200 | 10.51 | 34.73 | 2.94 | 26.67 | 138 | 0.48 |
| 333 | 9.37 | 34.69 | 3.22 | 26.84 | 250 | 9.88 | 34.69 | 2.96 | 26.75 | 130 | 0.55 |
| 381 | 8.90 | 34.64 | 3.39 | 26.87 | 300 | 9.60 | 34.69 | 3.04 | 26.80 | 126 | 0.62 |
| 430 | 8.48 | 34.61 | 3.38 | 26.91 | 400 | 8.72 | 34.63 | 3.38 | 26.89 | 117 | 0.75 |
| 480 | 7.97 | 34.60 | 3.45 | 26.99 | | | | | | | |

HUGH M. SMITH; June 9, 1952; 0357 GCT; 7°04'N, 140°04'W; wind, 090°, 11 kt; weather, cloudy; sea, rough; wire angle, 15°. 32

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.65 | 34.55 | 0.35 | 22.19 | 0 | 27.65 | 34.55 | 0.35 | 22.19 | 565 | 0.00 |
| 10 | 27.59 | 34.56 | 0.34 | 22.22 | 10 | 27.59 | 34.56 | 0.34 | 22.22 | 562 | 0.06 |
| 24 | 27.24 | 34.71 | 0.39 | 22.44 | 20 | 27.45 | 34.60 | 0.36 | 22.29 | 555 | 0.11 |
| 48 | 26.74 | 34.90 | 0.53 | 22.75 | 30 | 27.19 | 34.76 | 0.41 | 22.81 | 505 | 0.17 |
| 96 | 12.46 | 34.69 | 2.68 | 26.28 | 50 | 26.60 | 34.91 | 0.56 | 22.80 | 507 | 0.27 |
| 191a) | 10.06 | 34.69 | 2.53 | 26.72 | 75 | 13.80 | 34.59 | 2.58 | 25.93 | 208 | 0.36 |
| 239 | 9.56 | 34.69 | 2.64 | 26.80 | 100 | 12.30 | 34.71 | 2.67 | 26.33 | 171 | 0.41 |
| 287 | 9.18 | 34.66 | 2.65 | 26.84 | 150 | 10.81 | 34.72 | 2.54 | 26.61 | 144 | 0.49 |
| 336 | 8.86 | 34.65 | 2.72 | 26.90 | 200 | 9.97 | 34.69 | 2.55 | 26.74 | 132 | 0.56 |
| 382 | 8.57 | 34.64 | 2.72 | 26.92 | 250 | 9.40 | 34.68 | 2.64 | 26.82 | 124 | 0.63 |
| 430 | 8.10 | 34.62 | 2.81 | 26.98 | 300 | 9.07 | 34.66 | 2.67 | 26.86 | 120 | 0.69 |
| 479 | 7.70 | 34.61 | 2.90 | 27.03 | 400 | 8.39 | 34.63 | 2.55 | 26.94 | 112 | 0.81 |

HUGH M. SMITH; June 9, 1952; 1421 GCT; 6°05'N, 139°58'W; wind, 200°, 4 kt; weather, cloudy; sea, slight; wire angle, 28°. 33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.83 | 34.39 | 0.55 | 22.01 | 0 | 27.83 | 34.39 | 0.55 | 22.01 | 582 | 0.00 |
| 9 | 27.85 | 34.46 | 0.55 | 22.06 | 10 | 27.85 | 34.46 | 0.56 | 22.06 | 578 | 0.06 |
| 22 | 27.84 | 34.47 | 0.59 | 22.07 | 20 | 27.84 | 34.47 | 0.59 | 22.07 | 576 | 0.12 |
| 42 | 27.84 | 34.47 | 0.61 | 22.07 | 30 | 27.84 | 34.47 | 0.60 | 22.07 | 576 | 0.17 |
| 81 | 24.61 | 34.86 | 0.79 | 23.37 | 50 | 27.80 | 34.56 | 0.61 | 22.15 | 569 | 0.29 |
| 117 | 14.10 | 34.59 | 1.92 | 25.87 | 75 | 26.66 | 34.82 | 0.66 | 22.71 | 515 | 0.42 |
| 155 | 11.20 | 34.71 | 2.59 | 26.53 | 100 | 18.20 | 34.74 | 1.42 | 25.04 | 293 | 0.53 |
| 192 | 10.37 | 34.70 | 2.74 | 26.67 | 150 | 11.35 | 34.71 | 2.55 | 26.50 | 154 | 0.64 |
| 231 | 9.92 | 34.70 | 2.68 | 26.75 | 200 | 10.22 | 34.70 | 2.74 | 26.70 | 135 | 0.71 |
| 271 | 9.52 | 34.68 | 2.68 | 26.80 | 250 | 9.72 | 34.69 | 2.67 | 26.77 | 128 | 0.78 |
| 312b) | 9.24 | 34.69 | 2.73 | 26.81 | 300 | 9.32 | 34.69 | 2.71 | 26.84 | 122 | 0.85 |
| 355 | 8.92 | 34.65 | 2.84 | 26.88 | 400 | 8.68 | 34.61 | 2.88 | 26.88 | 178 | 0.98 |
| 400 | 8.68 | 34.61 | 2.88 | 26.88 | | | | | | | |

a) The 150-meter Nansen bottle pretripped.
b) Depth uncertain because of erratic unprotected thermometer.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **34** | HUGH M. SMITH; June 10, 1952; 0101 GCT; 5°00'N, 139°51'W; wind, 180°, 7 kt; weather, cloudy; sea, slight; wire angle, 22°. | | | | | | | | | | |
| 0 | 28.35 | 34.51 | 0.41 | 21.93 | 0 | 28.35 | 34.51 | 0.41 | 21.93 | 590 | 0.00 |
| 10 | 28.14 | 34.52 | 0.39 | 22.01 | 10 | 28.14 | 34.52 | 0.39 | 22.01 | 582 | 0.06 |
| 23 | 28.05 | 34.52 | 0.42 | 22.04 | 20 | 28.07 | 34.52 | 0.41 | 22.04 | 580 | 0.12 |
| 47 | 27.72 | 34.79 | 0.57 | 22.35 | 30 | 28.03 | 34.52 | 0.44 | 22.05 | 579 | 0.17 |
| 93 | 25.25 | 34.96 | 0.77 | 23.25 | 50 | 27.70 | 34.79 | 0.58 | 22.36 | 549 | 0.29 |
| 139 | 14.84 | 34.68 | 1.74 | 25.78 | 75 | 27.55 | 34.82 | 0.60 | 22.43 | 542 | 0.42 |
| 184 | 11.44 | 34.63 | 2.25 | 26.43 | 100 | 24.32 | 34.96 | 0.85 | 23.54 | 436 | 0.55 |
| 229 | 10.10 | 34.67 | 2.39 | 26.70 | 150 | 13.10 | 34.65 | 2.02 | 26.12 | 190 | 0.71 |
| 274 | 9.78 | 34.70 | 2.26 | 26.77 | 200 | 10.86 | 34.64 | 2.36 | 26.54 | 150 | 0.80 |
| 319 | 9.43 | 34.69 | 2.38 | 26.83 | 250 | 9.90 | 34.70 | 2.29 | 26.75 | 130 | 0.87 |
| 365 | 9.06 | 34.64 | 2.71 | 26.85 | 300 | 9.59 | 34.70 | 2.31 | 26.81 | 125 | 0.94 |
| 410 | 8.68 | 34.65 | 2.70 | 26.92 | 400 | 8.77 | 34.65 | 2.70 | 26.90 | 116 | 1.06 |
| 456 | 8.32 | 34.62 | 2.74 | 26.95 | | | | | | | |
| **35** | HUGH M. SMITH; June 10, 1952; 1004 GCT; 4°01'N, 139°55'W; wind, 110°, 9 kt; weather, partly cloudy; sea, slight; wire angle, 38°. | | | | | | | | | | |
| 0 | 27.42 | 34.83 | 0.68 | 22.48 | 0 | 27.42 | 34.83 | 0.68 | 22.48 | 536 | 0.00 |
| 8 | 27.42 | 34.81 | 0.61 | 22.46 | 10 | 27.40 | 34.81 | 0.61 | 22.47 | 538 | 0.05 |
| 19 | 27.14 | 34.95 | 0.65 | 22.66 | 20 | 27.12 | 34.96 | 0.67 | 22.67 | 519 | 0.11 |
| 37 | 27.02 | 35.00 | 0.70 | 22.74 | 30 | 27.05 | 35.00 | 0.68 | 22.72 | 514 | 0.16 |
| 70 | 27.04 | 35.01 | 0.75 | 22.73 | 50 | 27.04 | 35.01 | 0.72 | 22.73 | 513 | 0.26 |
| 102a) | 27.18 | 34.99 | 0.73 | 22.67 | 75 | 26.90 | 35.02 | 0.75 | 22.79 | 508 | 0.39 |
| 137 | 13.00 | 34.93 | 2.29 | 26.35 | 100 | 23.50 | 34.95 | 1.10 | 23.77 | 414 | 0.51 |
| 173 | 12.28 | 34.92 | 2.40 | 26.49 | 150 | 12.75 | 34.93 | 2.34 | 26.41 | 163 | 0.65 |
| 211 | 11.54 | 34.85 | 2.25 | 26.57 | 200 | 11.78 | 34.88 | 2.27 | 26.55 | 149 | 0.73 |
| 250 | 11.67 | 34.81 | 2.28 | 26.52 | 250 | 11.00 | 34.80 | 2.28 | 26.64 | 141 | 0.81 |
| 288 | 10.58 | 34.77 | 2.33 | 26.69 | 300 | 10.39 | 34.77 | 2.41 | 26.72 | 133 | 0.88 |
| 328 | 10.09 | 34.75 | 2.59 | 26.76 | 400 | (9.52) | (34.69) | | (26.81) | (125) | (1.02) |
| 368 | 9.79 | 34.71 | 2.42 | 26.78 | | | | | | | |
| **36** | HUGH M. SMITH; June 10, 1952; 1825 GCT; 3°00'N, 139°57'W; wind, 140°, 8 kt; weather, partly cloudy; sea, slight; wire angle, 47°. | | | | | | | | | | |
| 0 | 26.98 | 34.87 | 0.56 | 22.65 | 0 | 26.98 | 34.87 | 0.56 | 22.65 | 521 | 0.00 |
| 6 | 26.92 | 34.91 | 0.55 | 22.70 | 10 | 26.90 | 34.92 | 0.58 | 22.71 | 515 | 0.05 |
| 16 | 26.86 | 34.94 | 0.61 | 22.74 | 20 | 26.78 | 35.00 | 0.61 | 22.81 | 505 | 0.10 |
| 32 | 26.50 | 35.02 | 0.62 | 22.91 | 30 | 26.52 | 35.02 | 0.61 | 22.91 | 496 | 0.15 |
| 58 | 26.47 | 35.00 | 0.64 | 22.91 | 50 | 26.48 | 35.01 | 0.63 | 22.91 | 496 | 0.25 |
| 80 | 23.69 | 34.95 | 0.90 | 23.72 | 75 | 25.40 | 34.97 | 0.74 | 23.22 | 467 | 0.37 |
| 97 | 16.06 | 34.87 | 1.80 | 25.65 | 100 | 15.47 | 34.88 | 1.87 | 25.80 | 221 | 0.46 |
| 118 | 14.03 | 34.94 | 2.00 | 26.15 | 150 | 12.90 | 34.94 | 2.09 | 26.38 | 165 | 0.56 |
| 139 | 13.14 | 34.93 | 2.04 | 26.33 | 200 | 12.32 | 34.90 | 2.18 | 26.47 | 157 | 0.64 |
| 161 | 12.70 | 34.95 | 2.14 | 26.42 | 250 | (11.60) | (34.86) | | (26.57) | (147) | (0.72) |
| 184 | 12.57 | 34.94 | 2.14 | 26.45 | 300 | (10.95) | (34.80) | | (26.65) | (140) | (0.80) |
| 210 | 12.19 | 34.88 | 2.21 | 26.48 | 400 | (9.68) | (34.69) | | (26.78) | (127) | (0.94) |
| 235 | 11.83 | 34.88 | 2.29 | 26.55 | | | | | | | |

a) Suspected pretrip.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | μg at/L | g/L | m | °C | ‰ | μg at/L | g/L | cl/ton | dyn m |
| HUGH M. SMITH; June 11, 1952; 0254 GCT; 2°00'N, 139°56'W; wind, 120°, 10 kt; weather, cloudy; sea, moderate; wire angle, 32°. | | | | | | | | | | | 37 |
| 0 | 27.05 | 34.97 | 0.73 | 22.70 | 0 | 27.05 | 34.97 | 0.73 | 22.70 | 516 | 0.00 |
| 8 | 26.88 | 35.00 | 0.73 | 22.78 | 10 | 26.87 | 35.02 | 0.73 | 22.80 | 507 | 0.05 |
| 21 | 26.72 | 35.05 | 0.73 | 22.87 | 20 | 26.73 | 35.05 | 0.73 | 22.86 | 501 | 0.10 |
| 42 | 26.28 | 35.05 | 0.78 | 23.00 | 30 | 26.52 | 35.05 | 0.74 | 22.93 | 494 | 0.15 |
| 81 | 22.64 | 34.90 | 1.21 | 23.98 | 50 | 26.23 | 35.05 | 0.78 | 23.02 | 486 | 0.25 |
| 120 | 13.80 | 34.75 | 1.99 | 26.05 | 75 | 25.00 | 35.00 | 0.97 | 23.36 | 453 | 0.37 |
| 157 | 12.47 | 34.87 | 2.32 | 26.41 | 100 | 17.90 | 34.80 | 1.61 | 25.16 | 281 | 0.46 |
| 196 | 12.10 | 34.87 | 2.54 | 26.49 | 150 | 12.59 | 34.86 | 2.27 | 26.38 | 165 | 0.57 |
| 235 | 11.77 | 34.86 | 2.48 | 26.54 | 200 | 12.08 | 34.87 | 2.54 | 26.49 | 155 | 0.66 |
| 275 | 11.44 | 34.85 | 2.57 | 26.59 | 250 | 11.63 | 34.86 | 2.49 | 26.57 | 148 | 0.74 |
| 315 | 10.84 | 34.78 | 2.62 | 26.65 | 300 | 11.12 | 34.82 | 2.60 | 26.63 | 142 | 0.81 |
| 357 | 10.35 | 34.78 | 2.67 | 26.74 | 400 | 9.76 | 34.70 | 2.70 | 26.78 | 128 | 0.95 |
| 400 | 9.76 | 34.70 | 2.70 | 26.78 | | | | | | | |
| HUGH M. SMITH; June 11, 1952; 1132 GCT; 0°58'N, 139°56'W; wind, 100°, 11 kt; weather, partly cloudy; sea, moderate; wire angle, 36°. | | | | | | | | | | | 38 |
| 0 | 26.48 | 35.12 | 0.66 | 22.99 | 0 | 26.48 | 35.12 | 0.66 | 22.99 | 488 | 0.00 |
| 8 | 26.46 | 35.13 | 0.64 | 23.01 | 10 | 26.45 | 35.12 | 0.62 | 23.00 | 487 | 0.05 |
| 20 | 26.44 | 35.10 | 0.63 | 22.99 | 20 | 26.44 | 35.10 | 0.63 | 22.99 | 488 | 0.10 |
| 39 | 26.36 | 35.09 | 0.61 | 23.01 | 30 | 26.41 | 35.09 | 0.62 | 22.99 | 488 | 0.15 |
| 78 | 20.45 | 34.90 | 1.04 | 24.56 | 50 | 26.00 | 35.06 | 0.66 | 23.10 | 478 | 0.24 |
| 159a) | 11.95 | 34.80 | 1.88 | 26.46 | 75 | 21.00 | 34.92 | 0.99 | 24.45 | 349 | 0.35 |
| 199 | 11.74 | 34.87 | 2.04 | 26.55 | 100 | 17.00 | 34.84 | 1.32 | 25.41 | 258 | 0.42 |
| 243 | 11.52 | 34.85 | 2.21 | 26.58 | 150 | 12.00 | 34.80 | 1.85 | 26.44 | 158 | 0.53 |
| 331a) | 10.33 | 34.74 | 2.25 | 26.71 | 200 | 11.73 | 34.86 | 2.04 | 26.55 | 150 | 0.61 |
| 377 | 9.89 | 34.71 | 2.31 | 26.76 | 250 | 11.45 | 34.84 | 2.22 | 26.59 | 146 | 0.69 |
| 424 | 8.41 | 34.66 | 2.74 | 26.96 | 300 | 10.75 | 34.78 | 2.23 | 26.67 | 138 | 0.76 |
| | | | | | 400 | 9.35 | 34.68 | 2.48 | 26.83 | 123 | 0.90 |
| HUGH M. SMITH; June 11, 1952; 2029 GCT; 0°04'S, 139°54'W; wind, 110°, 13 kt; weather, partly cloudy; sea, moderate; wire angle, 33°. | | | | | | | | | | | 39 |
| 0 | 25.92 | 35.15 | 0.80 | 23.19 | 0 | 25.92 | 35.15 | 0.80 | 23.19 | 469 | 0.00 |
| 9 | 25.84 | 35.15 | 0.74 | 23.22 | 10 | 25.83 | 35.15 | 0.75 | 23.22 | 466 | 0.05 |
| 21 | 25.64 | 35.15 | 0.76 | 23.28 | 20 | 25.65 | 35.15 | 0.76 | 23.28 | 461 | 0.09 |
| 44 | 24.90 | 35.27 | 0.85 | 23.60 | 30 | 25.37 | 35.20 | 0.79 | 23.40 | 449 | 0.14 |
| 88 | 19.84 | 35.29 | 1.21 | 25.04 | 50 | 24.40 | 35.29 | 0.90 | 23.76 | 415 | 0.23 |
| 134 | 14.10 | 34.97 | 1.56 | 26.16 | 75 | 21.60 | 35.31 | 1.11 | 24.58 | 336 | 0.32 |
| 181 | 12.46 | 34.93 | 1.92 | 26.46 | 100 | 18.40 | 35.22 | 1.26 | 25.36 | 263 | 0.40 |
| 229 | 12.05 | 34.88 | 2.09 | 26.50 | 150 | 13.25 | 34.94 | 1.72 | 26.31 | 172 | 0.51 |
| 277 | 11.70 | 34.86 | 2.37 | 26.55 | 200 | 12.29 | 34.91 | 1.98 | 26.48 | 156 | 0.59 |
| 373b) | 9.82 | 34.73 | 2.67 | 26.79 | 250 | 11.94 | 34.87 | 2.17 | 26.52 | 152 | 0.67 |
| 422 | 8.95 | 34.70 | 2.86 | 26.91 | 300 | 11.28 | 34.82 | 2.43 | 26.60 | 144 | 0.75 |
| 471 | 8.16 | 34.63 | 3.00 | 26.98 | 400 | 9.39 | 34.71 | 2.77 | 26.85 | 121 | 0.89 |
| HUGH M. SMITH; June 12, 1952; 0614 GCT; 1°06'S, 139°51'W; wind, 130°, 12 kt; weather, partly cloudy; sea, moderate; wire angle, 18°. | | | | | | | | | | | 40 |
| 0 | 26.08 | 35.46 | 0.75 | 23.38 | 0 | 26.08 | 35.46 | 0.75 | 23.38 | 452 | 0.00 |
| 9 | 26.06 | 35.45 | 0.73 | 23.38 | 10 | 26.05 | 35.45 | 0.73 | 23.39 | 451 | 0.05 |
| 23 | 25.90 | 35.47 | 0.76 | 23.44 | 20 | 25.93 | 35.46 | 0.75 | 23.42 | 447 | 0.09 |
| 47 | 25.81 | 35.51 | 0.75 | 23.50 | 30 | 25.87 | 35.48 | 0.76 | 23.46 | 444 | 0.13 |
| 95 | 20.20 | 35.71 | 1.21 | 25.27 | 50 | 25.80 | 35.52 | 0.74 | 23.51 | 439 | 0.22 |
| 190c) | 12.98 | 35.02 | 1.99 | 26.43 | 75 | 23.50 | 35.69 | 0.87 | 24.30 | 360 | 0.32 |
| 238 | 11.92 | 34.90 | 2.13 | 26.54 | 100 | 19.38 | 35.66 | 1.29 | 25.31 | 267 | 0.40 |
| 285 | 11.72 | 34.88 | 2.26 | 26.57 | 150 | 14.72 | 35.21 | 1.78 | 26.21 | 182 | 0.51 |
| 333 | 11.28 | 34.86 | 2.27 | 26.63 | 200 | 12.60 | 34.98 | 2.04 | 26.47 | 156 | 0.60 |
| 381 | 9.78 | 34.77 | 2.40 | 26.83 | 250 | 11.86 | 34.89 | 2.18 | 26.55 | 150 | 0.68 |
| 430 | 8.51 | 34.66 | 2.60 | 26.95 | 300 | 11.62 | 34.88 | 2.26 | 26.59 | 146 | 0.76 |
| 479 | 7.88 | 34.63 | 2.74 | 27.02 | 400 | 9.32 | 34.73 | 2.46 | 26.87 | 119 | 0.90 |

a) The 120- and 300-meter Nansen bottles pretripped.
b) The 300-meter Nansen bottle pretripped.
c) The 150-meter Nansen bottle pretripped.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **41** | HUGH M. SMITH; June 12, 1952; 1459 GCT; 2°08'S, 139°50'W; wind, 140°, 9 kt; weather, cloudy; sea, moderate; wire angle, 07°. | | | | | | | | | | |
| 2 | 26.59 | 35.46 | 0.72 | 23.22 | 0 | (26.59) | (35.46) | (0.72) | (23.22) | (463) | (0.00) |
| 12 | 26.57 | 35.44 | 0.72 | 23.21 | 10 | 26.57 | 35.47 | 0.72 | 23.23 | 466 | 0.05 |
| 26 | 26.56 | 35.44 | 0.72 | 23.21 | 20 | 26.56 | 35.44 | 0.72 | 23.21 | 468 | 0.09 |
| 50 | 26.53 | 35.46 | 0.74 | 23.24 | 30 | 26.55 | 35.44 | 0.72 | 23.21 | 467 | 0.14 |
| 98 | 17.30 | 35.25 | 1.75 | 25.65 | 50 | 26.53 | 35.46 | 0.74 | 23.23 | 465 | 0.23 |
| 146 | 13.09 | 34.92 | 2.39 | 26.33 | 75 | 24.80 | 35.49 | 0.88 | 23.79 | 412 | 0.34 |
| 194 | 12.67 | 34.90 | 2.31 | 26.40 | 100 | 17.21 | 35.24 | 1.75 | 25.66 | 233 | 0.43 |
| 241 | 12.31 | 34.88 | 2.46 | 26.45 | 150 | 12.98 | 34.92 | 2.38 | 26.40 | 164 | 0.53 |
| 289 | 11.78 | 34.87 | 2.63 | 26.55 | 200 | 12.61 | 34.90 | 2.31 | 26.41 | 162 | 0.61 |
| 337 | 10.89 | 34.82 | 2.77 | 26.67 | 250 | 12.22 | 34.88 | 2.48 | 26.47 | 157 | 0.70 |
| 384 | 9.68 | 34.73 | 2.79 | 26.81 | 300 | 11.58 | 34.86 | 2.67 | 26.58 | 147 | 0.78 |
| 432 | 8.66 | 34.65 | 2.74 | 26.92 | 400 | 9.28 | 34.70 | 2.78 | 26.86 | 120 | 0.92 |
| 480 | 7.97 | 34.64 | 2.89 | 27.02 | | | | | | | |
| **42** | HUGH M. SMITH; June 12, 1952; 2205 GCT; 3°13'S, 139°49'W; wind, 130°, 9 kt; weather, partly cloudy; sea, rough; wire angle, 04°. | | | | | | | | | | |
| 2 | 27.32 | 35.41 | 0.70 | 22.94 | 0 | (27.32) | (35.41) | (0.70) | (22.94) | (493) | (0.00) |
| 12 | 27.28 | 35.42 | 0.71 | 22.97 | 10 | 27.30 | 35.42 | 0.70 | 22.96 | 491 | 0.05 |
| 27 | 27.19 | 35.43 | 0.69 | 23.00 | 20 | 27.21 | 35.42 | 0.69 | 22.99 | 488 | 0.10 |
| 52 | 27.19 | 35.43 | 0.69 | 23.00 | 30 | 27.19 | 35.43 | 0.69 | 23.00 | 487 | 0.15 |
| 100 | 17.64 | 35.35 | 1.43 | 25.64 | 50 | 27.19 | 35.43 | 0.69 | 23.00 | 487 | 0.24 |
| 149 | 13.10 | 34.96 | 2.07 | 26.36 | 75 | 23.30 | 35.56 | 0.91 | 24.29 | 364 | 0.35 |
| 198 | 12.64 | 34.90 | 2.17 | 26.40 | 100 | 17.64 | 35.35 | 1.43 | 25.64 | 235 | 0.43 |
| 247 | 12.32 | 34.88 | 2.34 | 26.45 | 150 | 13.09 | 34.96 | 2.07 | 26.36 | 167 | 0.53 |
| 296 | 11.96 | 34.87 | 2.56 | 26.52 | 200 | 12.62 | 34.90 | 2.18 | 26.41 | 163 | 0.62 |
| 344 | 11.34 | 34.83 | 2.68 | 26.60 | 250 | 12.32 | 34.88 | 2.36 | 26.45 | 159 | 0.70 |
| 393 | 10.18 | 34.74 | 2.75 | 26.74 | 300 | 11.95 | 34.87 | 2.54 | 26.52 | 152 | 0.78 |
| 442 | 9.10 | 34.70 | 2.73 | 26.89 | 400 | 10.02 | 34.73 | 2.74 | 26.76 | 130 | 0.93 |
| 492 | 8.12 | 34.63 | 2.78 | 26.98 | | | | | | | |
| **43** | HUGH M. SMITH; June 13, 1952; 0529 GCT; 4°05'S, 139°49'W; wind, 110°, 11 kt; weather, partly cloudy; sea, rough; wire angle, 16°. | | | | | | | | | | |
| 0 | 27.40 | 35.42 | 0.70 | 22.93 | 0 | 27.40 | 35.42 | 0.70 | 22.93 | 494 | 0.00 |
| 10 | 27.38 | 35.43 | 0.72 | 22.94 | 10 | 27.38 | 35.43 | 0.72 | 22.94 | 493 | 0.05 |
| 24 | 27.30 | 35.44 | 0.71 | 22.97 | 20 | 27.32 | 35.44 | 0.73 | 22.97 | 491 | 0.10 |
| 48 | 27.30 | 35.43 | 0.73 | 22.97 | 30 | 27.30 | 35.44 | 0.73 | 22.97 | 490 | 0.15 |
| 95 | 23.90 | 35.62 | 1.13 | 24.16 | 50 | 27.30 | 35.43 | 0.73 | 22.97 | 491 | 0.25 |
| 142 | 13.57 | 34.99 | 2.36 | 26.29 | 75 | 27.27 | 35.43 | 0.74 | 22.98 | 489 | 0.37 |
| 189 | 12.56 | 34.90 | 2.43 | 26.42 | 100 | 22.80 | 35.61 | 1.26 | 24.47 | 347 | 0.48 |
| 234 | 12.22 | 34.87 | 2.58 | 26.46 | 150 | 13.27 | 34.97 | 2.37 | 26.33 | 170 | 0.61 |
| 280 | 11.78 | 34.84 | 2.73 | 26.52 | 200 | 12.45 | 34.89 | 2.45 | 26.44 | 160 | 0.69 |
| 327 | 11.21 | 34.82 | 2.59 | 26.61 | 250 | 12.09 | 34.86 | 2.62 | 26.48 | 156 | 0.77 |
| 374 | 9.98 | 34.73 | 2.81 | 26.76 | 300 | 11.55 | 34.83 | 2.67 | 26.56 | 148 | 0.85 |
| 420 | 9.12 | 34.68 | 2.92 | 26.87 | 400 | 9.40 | 34.69 | 2.89 | 26.83 | 123 | 1.00 |
| 469 | 8.52 | 34.65 | 2.81 | 27.21 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |

HUGH M. SMITH; June 13, 1952; 1803, 1815 GCT; 5°32'S, 139°54'W; wind, 130°, 18 kt; weather, cloudy; sea, rough; wire angle, 25°, 28°. 44

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.54 | 35.09 | 0.67 | 22.63 | 0 | 27.54 | 35.09 | 0.67 | 22.63 | 523 | 0.00 |
| 8 | 27.54 | 35.10 | 0.65 | 22.64 | 10 | 27.54 | 35.10 | 0.66 | 22.64 | 522 | 0.05 |
| 22 | 27.52 | 35.11 | 0.63 | 22.65 | 20 | 27.52 | 35.11 | 0.64 | 22.65 | 520 | 0.10 |
| | | | | | 30 | 27.52 | 35.12 | 0.63 | 22.66 | 520 | 0.16 |
| 44 | 27.52 | 35.14 | 0.64 | 22.68 | 50 | 27.47 | 35.17 | 0.63 | 22.72 | 514 | 0.26 |
| 88 | 25.82 | 35.70 | 0.76 | 23.64 | 75 | 26.73 | 35.50 | 0.70 | 23.20 | 468 | 0.38 |
| 134 | 19.81 | 35.64 | 1.05 | 25.32 | 100 | 25.01 | 35.81 | 0.79 | 23.97 | 395 | 0.49 |
| 178 | 13.87 | 35.00 | 2.11 | 26.23 | 150 | 16.80 | 35.31 | 1.60 | 25.93 | 208 | 0.65 |
| 223 | 12.08 | 34.88 | 2.60 | 26.50 | 200 | 12.79 | 34.93 | 2.42 | 26.40 | 164 | 0.75 |
| 267 | 11.34 | 34.84 | 2.57 | 26.60 | 250 | 11.59 | 34.85 | 2.57 | 26.57 | 148 | 0.83 |
| 312 | 10.74 | 34.79 | 2.62 | 26.68 | 300 | 10.90 | 34.81 | 2.59 | 26.66 | 138 | 0.90 |
| 357 | 9.98 | 34.73 | 2.75 | 26.76 | 400 | 9.36 | 34.69 | 2.79 | 26.83 | 122 | 1.04 |
| 402 | 9.34 | 34.69 | 2.80 | 26.84 | | | | | | | |
| 447 | 8.83 | 34.64 | 2.86 | 26.88 | | | | | | | |

HUGH M. SMITH; June 14, 1952; 0657 GCT; 7°00'S, 140°00'W; wind, 120°, 18 kt; weather, intermittent heavy rain; sea, rough; wire angle, 26°. 45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.71 | 34.95 | 0.70 | 22.47 | 0 | 27.71 | 34.95 | 0.70 | 22.47 | 538 | 0.00 |
| 9 | 27.70 | 34.97 | 0.68 | 22.49 | 10 | 27.70 | 34.97 | 0.68 | 22.49 | 536 | 0.05 |
| 22 | 27.68 | 34.96 | 0.70 | 22.49 | 20 | 27.68 | 34.96 | 0.70 | 22.49 | 536 | 0.11 |
| 43 | 27.71 | 34.96 | 0.71 | 22.48 | 30 | 27.69 | 34.96 | 0.72 | 22.49 | 536 | 0.16 |
| 86 | 27.36 | 35.87 | 0.76 | 23.28 | 50 | 27.71 | 35.01 | 0.72 | 22.52 | 534 | 0.27 |
| 127 | 24.36 | 36.20 | 0.81 | 24.46 | 75 | 27.80 | 35.08 | 0.75 | 22.54 | 531 | 0.40 |
| 169 | 20.33 | 35.74 | 1.05 | 25.25 | 100 | 27.22 | 35.90 | 0.76 | 23.35 | 454 | 0.53 |
| 210 | 16.91 | 35.22 | 1.42 | 25.72 | 150 | 21.80 | 36.05 | 0.77 | 25.09 | 288 | 0.72 |
| 251 | 12.74 | 34.78 | 2.12 | 26.29 | 200 | 18.37 | 35.43 | 1.25 | 25.53 | 246 | 0.85 |
| 292 | 11.10 | 34.77 | 2.51 | 26.60 | 250 | 12.88 | 34.79 | 2.09 | 26.27 | 176 | 0.96 |
| 335 | 9.86 | 34.73 | 2.48 | 26.78 | 300 | 10.85 | 34.77 | 2.51 | 26.64 | 140 | 1.04 |
| 375 | 9.09 | 34.63 | 2.62 | 26.87 | 400 | 8.75 | 34.67 | 2.62 | 26.92 | 114 | 1.18 |
| 417 | 8.55 | 34.66 | 2.61 | 26.94 | | | | | | | |

HUGH M. SMITH; June 15, 1952; 0010, 0047 GCT; 5°29'S, 140°05'W; wind, 080°, 13 kt; weather, partly cloudy; sea, rough; wire angle, 39°, 48°. 46

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.61 | 35.26 | 0.71 | 22.74 | 0 | 27.61 | 35.26 | 0.71 | 22.74 | 513 | 0.00 |
| 8 | 27.60 | 35.26 | 0.71 | 22.74 | 10 | 27.58 | 35.26 | 0.71 | 22.75 | 512 | 0.05 |
| 20 | 27.52 | 35.25 | 0.70 | 22.76 | 20 | 27.52 | 35.25 | 0.70 | 22.76 | 510 | 0.10 |
| 37 | 27.50 | 35.27 | 0.70 | 22.78 | 30 | 27.52 | 35.26 | 0.70 | 22.77 | 510 | 0.15 |
| 71 | 27.30 | 35.35 | 0.69 | 22.91 | 50 | 27.41 | 35.32 | 0.71 | 22.85 | 502 | 0.25 |
| 103 | 24.00 | 35.88 | 0.89 | 24.33 | 75 | 26.69 | 35.52 | 0.74 | 23.21 | 467 | 0.38 |
| 137 | 19.18 | 35.57 | 1.10 | 25.43 | 100 | 24.60 | 35.86 | 0.86 | 24.13 | 379 | 0.48 |
| 171 | 14.86 | 35.12 | 1.95 | 26.11 | 150 | 17.47 | 35.39 | 1.18 | 25.72 | 228 | 0.64 |
| 207 | 13.42 | 35.00 | 2.15 | 26.33 | 200 | 13.75 | 35.01 | 2.10 | 26.26 | 176 | 0.74 |
| | | | | | 250 | 12.15 | 34.89 | 2.31 | 26.49 | 155 | 0.83 |
| 236a) | 12.46 | 34.93 | 2.50 | 26.46 | 300 | 11.19 | 34.83 | 2.45 | 26.63 | 142 | 0.91 |
| | | | | | 400 | (9.36) | (34.68) | (2.77) | (26.83) | (123) | (1.05) |
| 283 | 11.44 | 34.84 | 2.48 | 26.59 | | | | | | | |
| 323 | 10.89 | 34.82 | 2.44 | 26.67 | | | | | | | |
| 364 | 9.92 | 34.75 | 2.65 | 26.79 | | | | | | | |

a) Nansen bottle pretripped and was sent down again as a second cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| 47 | HUGH M. SMITH; June 15, 1952; 1621 GCT; 3°43'S, 140°04'W; wind, 080°, 11 kt; weather, cloudy; sea, moderate; wire angle, 23°. | | | | | | | | | | |
| 0 | 27.29 | 35.39 | 0.71 | 22.94 | 0 | 27.29 | 35.39 | 0.71 | 22.94 | 493 | 0.00 |
| 9 | 27.26 | 35.38 | 0.71 | 22.94 | 10 | 27.26 | 35.38 | 0.71 | 22.91 | 496 | 0.05 |
| 23 | 27.25 | 35.38 | 0.69 | 22.94 | 20 | 27.25 | 35.38 | 0.71 | 22.95 | 493 | 0.10 |
| 45 | 27.24 | 35.37 | 0.70 | 22.94 | 30 | 27.25 | 35.38 | 0.71 | 22.95 | 493 | 0.15 |
| 90 | 22.08 | 35.43 | 1.30 | 24.54 | 50 | 27.22 | 35.37 | 0.71 | 22.95 | 492 | 0.25 |
| 133 | 13.37 | 34.95 | 2.33 | 26.30 | 75 | 26.00 | 35.39 | 0.85 | 23.35 | 454 | 0.37 |
| 175 | 12.78 | 34.90 | 2.37 | 26.38 | 100 | 20.02 | 35.41 | 1.53 | 25.09 | 288 | 0.46 |
| 218 | 12.44 | 34.87 | 2.39 | 26.42 | 150 | 13.05 | 34.93 | 2.34 | 26.33 | 170 | 0.58 |
| 260 | 12.15 | 34.87 | 2.35 | 26.48 | 200 | 12.59 | 34.88 | 2.38 | 26.40 | 164 | 0.66 |
| 302 | 11.82 | 34.88 | 2.68 | 26.55 | 250 | 12.23 | 34.87 | 2.34 | 26.46 | 158 | 0.75 |
| 346 | 11.30 | 34.81 | 2.77 | 26.59 | 300 | 11.84 | 34.88 | 2.67 | 26.54 | 150 | 0.83 |
| 389 | 10.31 | 34.77 | 2.82 | 26.74 | 400 | 10.07 | 34.76 | 2.85 | 26.77 | 128 | 0.97 |
| 433 | 9.24 | 34.67 | 2.94 | 26.84 | | | | | | | |
| 48 | HUGH M. SMITH; June 15, 1952; 2340 GCT; 3°00'S, 140°00'W; wind, 120°, 11 kt; weather, partly cloudy; sea, moderate; wire angle, 27°. | | | | | | | | | | |
| 0 | 27.14 | 35.47 | 0.73 | 23.05 | 0 | 27.14 | 35.47 | 0.73 | 23.05 | 483 | 0.00 |
| 9 | 27.04 | 35.46 | 0.73 | 23.07 | 10 | 27.02 | 35.46 | 0.73 | 23.12 | 480 | 0.05 |
| 22 | 26.90 | 35.45 | 0.72 | 23.11 | 20 | 26.93 | 35.45 | 0.71 | 23.10 | 478 | 0.10 |
| 44 | 26.88 | 35.46 | 0.72 | 23.12 | 30 | 26.88 | 35.45 | 0.72 | 23.12 | 476 | 0.14 |
| 87 | 22.16 | 35.44 | 1.23 | 24.52 | 50 | 26.85 | 35.46 | 0.73 | 23.13 | 475 | 0.24 |
| 129 | 13.86 | 34.99 | 2.19 | 26.23 | 75 | 24.20 | 35.45 | 1.01 | 23.94 | 398 | 0.35 |
| 171 | 12.86 | 34.89 | 2.35 | 26.35 | 100 | 19.00 | 35.40 | 1.56 | 25.34 | 264 | 0.43 |
| 213 | 12.53 | 34.88 | 2.40 | 26.41 | 150 | 13.20 | 34.91 | 2.29 | 26.30 | 173 | 0.54 |
| 256 | 12.14 | 34.86 | 2.48 | 26.47 | 200 | 12.60 | 34.88 | 2.40 | 26.40 | 164 | 0.63 |
| 298 | 11.69 | 34.82 | 2.50 | 26.53 | 250 | 12.19 | 34.86 | 2.47 | 26.46 | 158 | 0.71 |
| 341 | 10.85 | 34.78 | 2.75 | 26.65 | 300 | 11.62 | 34.82 | 2.60 | 26.54 | 150 | 0.80 |
| 384 | 10.25 | 34.75 | 2.74 | 26.73 | 400 | 9.82 | 34.73 | 2.74 | 26.79 | 126 | 0.94 |
| 428 | 9.03 | 34.66 | 2.77 | 26.87 | | | | | | | |
| 49 | HUGH M. SMITH; June 16, 1952; 0914 GCT; 2°00'S, 139°53'W; wind, 100°, 12 kt; weather, partly cloudy; sea, moderate; wire angle, 20°. | | | | | | | | | | |
| 0 | 26.57 | 35.53 | 0.81 | 23.27 | 0 | 26.57 | 35.53 | 0.81 | 23.27 | 461 | 0.00 |
| 9 | 26.57 | 35.55 | 0.79 | 23.29 | 10 | 26.57 | 35.55 | 0.78 | 23.29 | 460 | 0.05 |
| 23 | 26.54 | 35.55 | 0.78 | 23.30 | 20 | 26.55 | 35.55 | 0.77 | 23.30 | 459 | 0.09 |
| 46 | 26.46 | 35.54 | 0.76 | 23.32 | 30 | 26.53 | 35.55 | 0.76 | 23.30 | 458 | 0.14 |
| 92 | 22.12 | 35.63 | 1.16 | 24.68 | 50 | 26.44 | 35.54 | 0.76 | 23.32 | 457 | 0.23 |
| 136 | 13.90 | 35.05 | 2.21 | 26.26 | 75 | 25.20 | 35.58 | 0.85 | 23.74 | 417 | 0.34 |
| 181 | 12.71 | 34.96 | 2.20 | 26.44 | 100 | 21.30 | 35.62 | 1.25 | 24.90 | 306 | 0.43 |
| 226 | 12.28 | 34.93 | 2.32 | 26.50 | 150 | 13.19 | 35.00 | 2.19 | 26.37 | 166 | 0.55 |
| 272 | 11.90 | 34.91 | 2.35 | 26.56 | 200 | 12.52 | 34.94 | 2.26 | 26.46 | 158 | 0.64 |
| 319 | 11.48 | 34.87 | 2.35 | 26.60 | 250 | 12.07 | 34.92 | 2.34 | 26.53 | 151 | 0.72 |
| 366 | 11.04 | 34.84 | 2.25 | 26.66 | 300 | 11.63 | 34.89 | 2.35 | 26.59 | 146 | 0.79 |
| 413 | 9.72 | 34.78 | 2.71 | 26.85 | 400 | 10.18 | 34.79 | 2.85 | 26.78 | 128 | 0.94 |
| 463 | 8.26 | 34.66 | 2.73 | 26.99 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | μg at/L | g/L | m | °C | ‰ | μg at/L | g/L | cl/ton | dyn m |
| HUGH M. SMITH; June 16, 1952; 1834 GCT; 0°57'S, 139°47'W; wind, 090°, 11 kt; weather, partly cloudy; sea, moderate; wire angle, 25°. | | | | | | | | | | | 50 |
| 0 | 25.94 | 35.45 | 0.76 | 23.41 | 0 | 25.94 | 35.45 | 0.76 | 23.41 | 448 | 0.00 |
| 9 | 25.90 | 35.43 | 0.76 | 23.41 | 10 | 25.89 | 35.43 | 0.76 | 23.41 | 448 | 0.04 |
| 23 | 25.82 | 35.44 | 0.78 | 23.44 | 20 | 25.84 | 35.44 | 0.78 | 23.43 | 446 | 0.09 |
| 45 | 25.63 | 35.47 | 0.79 | 23.52 | 30 | 25.79 | 35.44 | 0.78 | 23.45 | 444 | 0.13 |
| 91 | 21.36 | 35.77 | 1.16 | 25.00 | 50 | 25.58 | 35.49 | 0.81 | 23.55 | 435 | 0.22 |
| 186a) | 13.07 | 34.96 | 1.72 | 26.37 | 75 | 24.20 | 35.66 | 0.75 | 24.10 | 382 | 0.33 |
| 233 | 12.06 | 34.91 | 2.05 | 26.53 | 100 | 20.65 | 35.74 | 1.17 | 24.41 | 353 | 0.41 |
| 281 | 11.68 | 34.87 | 2.33 | 26.57 | 150 | 14.18 | 35.07 | 1.58 | 26.22 | 181 | 0.53 |
| 330 | 10.20 | 34.77 | 2.35 | 26.76 | 200 | 12.78 | 34.94 | 1.81 | 26.60 | 144 | 0.62 |
| 378 | 9.15 | 34.69 | 2.57 | 26.87 | 250 | 11.95 | 34.90 | 2.18 | 26.54 | 150 | 0.70 |
| 427 | 8.46 | 34.67 | 2.69 | 26.96 | 300 | 11.25 | 34.84 | 2.34 | 26.59 | 146 | 0.77 |
| 476 | 7.72 | 34.62 | 2.87 | 27.04 | 400 | 8.84 | 34.68 | 2.62 | 26.91 | 115 | 0.91 |
| HUGH M. SMITH; June 17, 1952; 0119 GCT; 0°01'S, 139°43'W; wind, 100°, 9 kt; weather, partly cloudy; sea, moderate; wire angle, 46°. | | | | | | | | | | | 51 |
| 0 | 25.94 | 35.26 | 0.78 | 23.27 | 0 | 25.94 | 35.26 | 0.78 | 23.27 | 462 | 0.00 |
| 6 | 25.87 | 35.26 | 0.76 | 23.29 | 10 | 25.73 | 35.26 | 0.76 | 23.33 | 456 | 0.05 |
| 17 | 25.44 | 35.25 | 0.76 | 23.41 | 20 | 25.38 | 35.25 | 0.76 | 23.43 | 446 | 0.09 |
| 34 | 25.08 | 35.28 | 0.77 | 23.55 | 30 | 25.14 | 35.28 | 0.77 | 23.53 | 437 | 0.14 |
| 72 | 21.34 | 35.24 | 1.08 | 24.60 | 50 | 24.53 | 35.28 | 0.87 | 23.71 | 419 | 0.22 |
| 153b) | 13.88 | 34.92 | 1.53 | 26.17 | 75 | 21.05 | 35.23 | 1.08 | 24.67 | 328 | 0.32 |
| 198 | 12.40 | 34.88 | 1.84 | 26.44 | 100 | 20.00 | 35.21 | 1.12 | 24.94 | 302 | 0.40 |
| 244 | 11.98 | 34.85 | 2.04 | 26.50 | 150 | 13.98 | 34.92 | 1.33 | 26.14 | 188 | 0.52 |
| 290 | 11.46 | 34.81 | 2.35 | 26.56 | 200 | 12.38 | 34.88 | 1.86 | 26.44 | 160 | 0.61 |
| 337 | 10.40 | 34.73 | 2.34 | 26.69 | 250 | 11.90 | 34.84 | 2.09 | 26.50 | 154 | 0.69 |
| 385 | 9.76 | 34.71 | 2.51 | 26.79 | 300 | 11.21 | 34.79 | 2.35 | 26.59 | 146 | 0.77 |
| 435 | 8.88 | 34.65 | 2.64 | 26.88 | 400 | 9.54 | 34.70 | 2.54 | 26.81 | 124 | 0.91 |
| HUGH M. SMITH; June 17, 1952; 1013 GCT; 1°00'N, 139°51'W; wind, 100°, 11 kt; weather, partly cloudy; sea, moderate; wire angle, 17°. | | | | | | | | | | | 52 |
| 0 | 25.80 | 35.08 | 0.75 | 23.18 | 0 | 25.80 | 35.08 | 0.75 | 23.18 | 471 | 0.00 |
| 10 | 25.81 | 35.03 | 0.75 | 23.14 | 10 | 25.81 | 35.03 | 0.75 | 23.14 | 474 | 0.05 |
| 24 | 25.66 | 35.05 | 0.75 | 23.18 | 20 | 25.74 | 35.04 | 0.75 | 23.16 | 472 | 0.09 |
| 48 | 24.22 | 34.97 | 0.95 | 23.57 | 30 | 25.47 | 35.05 | 0.79 | 23.26 | 463 | 0.14 |
| 96 | 17.63 | 34.79 | 1.32 | 25.22 | 50 | 23.90 | 34.94 | 0.98 | 23.65 | 426 | 0.23 |
| 190c) | 11.72 | 34.85 | 2.07 | 26.54 | 75 | 20.38 | 34.83 | 1.15 | 24.55 | 340 | 0.33 |
| 236 | 11.62 | 34.86 | 2.25 | 26.57 | 100 | 17.46 | 34.79 | 1.33 | 25.26 | 272 | 0.40 |
| 283 | 11.26 | 34.81 | 2.33 | 26.60 | 150 | 12.52 | 34.88 | 1.80 | 26.41 | 162 | 0.51 |
| 331 | 10.82 | 34.83 | 2.35 | 26.69 | 200 | 11.68 | 34.85 | 2.20 | 26.55 | 149 | 0.60 |
| 377 | 9.70 | 34.69 | 2.36 | 26.78 | 250 | 11.55 | 34.84 | 2.27 | 26.57 | 148 | 0.67 |
| 426 | 8.56 | 34.67 | 2.68 | 26.95 | 300 | 11.12 | 34.81 | 2.35 | 26.62 | 142 | 0.75 |
| 474 | 7.99 | 34.63 | 2.78 | 27.01 | 400 | 9.05 | 34.68 | 2.54 | 26.88 | 118 | 0.89 |
| HUGH M. SMITH; June 17, 1952; 1951 GCT; 2°06'N, 140°02'W; wind, 110°, 11 kt; weather, partly cloudy; sea, moderate; wire angle, 43°. | | | | | | | | | | | 53 |
| 0 | 26.69 | 34.95 | 0.66 | 22.80 | 0 | 26.69 | 34.95 | 0.66 | 22.80 | 506 | 0.00 |
| 8 | 26.65 | 34.96 | 0.66 | 22.82 | 10 | 26.64 | 34.96 | 0.66 | 22.82 | 504 | 0.05 |
| 19 | 26.57 | 34.93 | 0.66 | 22.82 | 20 | 26.56 | 34.93 | 0.66 | 22.83 | 504 | 0.10 |
| 35 | 26.42 | 34.96 | 0.73 | 22.89 | 30 | 26.42 | 34.96 | 0.72 | 22.89 | 498 | 0.15 |
| 68 | 25.70 | 35.10 | 0.74 | 23.22 | 50 | 26.06 | 35.08 | 0.73 | 23.09 | 478 | 0.25 |
| 94 | 22.28 | 34.90 | 1.16 | 24.08 | 75 | 25.67 | 35.10 | 0.74 | 23.23 | 465 | 0.37 |
| 121 | 13.54 | 34.96 | 2.26 | 26.27 | 100 | 22.12 | 34.89 | 1.18 | 24.12 | 380 | 0.47 |
| 148 | 12.88 | 34.92 | 2.30 | 26.37 | 150 | 12.82 | 34.91 | 2.31 | 26.37 | 166 | 0.61 |
| 175 | 12.49 | 34.88 | 2.31 | 26.42 | 200 | 12.20 | 34.88 | 2.41 | 26.48 | 156 | 0.70 |
| 203 | 12.18 | 34.87 | 2.44 | 26.47 | 250 | 11.62 | 34.84 | 2.47 | 26.55 | 149 | 0.78 |
| 230 | 11.84 | 34.85 | 2.50 | 26.52 | 300 | (11.11) | (34.79) | (2.52) | (26.61) | (144) | (0.85) |
| 262 | 11.50 | 34.82 | 2.46 | 26.56 | 400 | (9.67) | (34.69) | | (26.78) | (127) | (1.00) |
| 299 | 11.12 | 34.79 | 2.52 | 26.61 | | | | | | | |

a) The 150-meter Nansen bottle pretripped.
b) The 120-meter Nansen bottle pretripped.
c) The 150-meter Nansen bottle pretripped.

HBL

HMS-15

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |

54 HUGH M. SMITH; June 18, 1952; 0420 GCT; 3°11'N, 140°13'W; wind, 140°, 13 kt; weather, partly cloudy; sea, moderate; wire angle, 43°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.92 | 34.67 | 0.48 | 22.19 | 0 | 27.92 | 34.67 | 0.48 | 22.19 | 565 | 0.00 |
| 8 | 27.94 | 34.67 | 0.48 | 22.19 | 10 | 27.93 | 34.67 | 0.49 | 22.19 | 565 | 0.06 |
| 21 | 27.90 | 34.67 | 0.48 | 22.20 | 20 | 27.90 | 34.67 | 0.48 | 22.20 | 564 | 0.11 |
| 36 | 27.83 | 34.68 | 0.52 | 22.23 | 30 | 27.87 | 34.67 | 0.49 | 22.21 | 563 | 0.17 |
| 69 | 27.41 | 34.82 | 0.58 | 22.48 | 50 | 27.70 | 34.72 | 0.54 | 22.30 | 554 | 0.28 |
| 100 | 25.62 | 34.93 | 0.81 | 23.12 | 75 | 27.25 | 34.85 | 0.62 | 22.55 | 531 | 0.42 |
| 127 | 13.86 | 34.95 | 2.13 | 26.19 | 100 | 25.62 | 34.93 | 0.81 | 23.12 | 476 | 0.54 |
| 155 | 13.07 | 34.94 | 2.15 | 26.35 | 150 | 13.18 | 34.95 | 2.14 | 26.34 | 170 | 0.71 |
| 185 | 12.74 | 34.92 | 2.18 | 26.40 | 200 | 12.57 | 34.91 | 2.20 | 26.43 | 161 | 0.79 |
| 216 | 12.35 | 34.89 | 2.26 | 26.45 | 250 | 12.01 | 34.87 | 2.34 | 26.50 | 154 | 0.88 |
| 249 | 12.04 | 34.87 | 2.33 | 26.50 | 300 | 11.32 | 34.81 | 2.35 | 26.59 | 146 | 0.95 |
| 283 | 11.58 | 34.83 | 2.36 | 26.55 | 400 | (9.79) | (34.70) | | (26.77) | (128) | (1.10) |
| 320 | 11.00 | 34.79 | 2.35 | 26.63 | | | | | | | |

55 HUGH M. SMITH; June 18, 1952; 1156 GCT; 4°00'N, 140°09'W; wind, 120°, 12 kt; weather, partly cloudy; sea, moderate; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.92 | 34.63 | 0.52 | 22.16 | 0 | 27.92 | 34.63 | 0.52 | 22.16 | 567 | 0.00 |
| 9 | 27.94 | 34.64 | 0.52 | 22.17 | 10 | 27.94 | 34.64 | 0.52 | 22.16 | 567 | 0.06 |
| 21 | 27.92 | 34.62 | 0.52 | 22.16 | 20 | 27.92 | 34.62 | 0.52 | 22.16 | 568 | 0.11 |
| 41 | 27.92 | 34.64 | 0.53 | 22.17 | 30 | 27.92 | 34.63 | 0.52 | 22.16 | 567 | 0.17 |
| 65a) | 27.89 | 34.70 | 0.66 | 22.23 | 50 | 27.92 | 34.67 | 0.52 | 22.19 | 565 | 0.28 |
| 79 | 27.28 | 34.84 | 0.69 | 22.53 | 75 | 27.61 | 34.81 | 0.58 | 22.40 | 545 | 0.42 |
| 158 | 12.99 | 34.91 | 2.21 | 26.34 | 100 | 26.60 | 34.91 | 0.76 | 22.80 | 507 | 0.56 |
| 197 | 12.14 | 34.88 | 2.43 | 26.49 | 150 | 13.06 | 34.91 | 2.20 | 26.33 | 170 | 0.73 |
| 240 | 11.60 | 34.83 | 2.46 | 26.55 | 200 | 12.06 | 34.87 | 2.43 | 26.50 | 154 | 0.81 |
| 283 | 10.96 | 34.79 | 2.44 | 26.64 | 250 | 11.43 | 34.82 | 2.45 | 26.57 | 147 | 0.89 |
| 327 | 10.39 | 34.77 | 2.47 | 26.73 | 300 | 10.72 | 34.78 | 2.44 | 26.67 | 138 | 0.96 |
| 372 | 10.02 | 34.73 | 2.39 | 26.76 | 400 | 9.73 | 34.72 | 2.42 | 26.80 | 126 | 1.10 |
| 419 | 9.50 | 34.71 | 2.47 | 26.83 | | | | | | | |

56 HUGH M. SMITH; June 18, 1952; 1922 GCT; 5°00'N, 140°04'W; wind, 130°, 10 kt; weather, cloudy; sea, moderate; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 27.98 | 34.65 | 0.49 | 22.16 | 0 | (27.98) | (34.65) | (0.49) | (22.16) | (568) | (0.00) |
| 12 | 27.84 | 34.66 | 0.51 | 22.21 | 10 | 27.85 | 34.66 | 0.50 | 22.21 | 563 | 0.06 |
| 27 | 27.82 | 34.64 | 0.45 | 22.20 | 20 | 27.83 | 34.65 | 0.48 | 22.21 | 563 | 0.11 |
| 52 | 27.82 | 34.64 | 0.46 | 22.20 | 30 | 27.82 | 34.64 | 0.46 | 22.20 | 564 | 0.17 |
| 101 | 27.50 | 34.92 | 0.64 | 22.52 | 50 | 27.82 | 34.64 | 0.46 | 22.20 | 564 | 0.28 |
| 197b) | 10.92 | 34.71 | 2.09 | 26.58 | 75 | 27.76 | 34.86 | 0.52 | 22.39 | 546 | 0.42 |
| 245 | 10.43 | 34.73 | 2.44 | 26.69 | 100 | 27.55 | 34.92 | 0.64 | 22.50 | 535 | 0.56 |
| 293 | 10.00 | 34.73 | 2.44 | 26.76 | 150 | 13.85 | 34.62 | 1.74 | 25.94 | 207 | 0.75 |
| 342 | 9.62 | 34.70 | 2.50 | 26.80 | 200 | 10.87 | 34.71 | 2.12 | 26.59 | 145 | 0.84 |
| 390 | 9.28 | 34.66 | 2.52 | 26.83 | 250 | 10.40 | 34.73 | 2.44 | 26.69 | 136 | 0.91 |
| 439 | 8.94 | 34.61 | 2.53 | 26.84 | 300 | 9.93 | 34.73 | 2.44 | 26.77 | 128 | 0.98 |
| 487 | 8.62 | 34.65 | 2.68 | 26.92 | 400 | 9.21 | 34.65 | 2.52 | 26.83 | 123 | 1.11 |

a) Suspected pretrip.
b) The 150-meter Nansen bottle pretripped.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| HUGH M. SMITH; June 19, 1952; 0242 GCT; 5°54'N, 140°00'W; wind, 010°, 4 kt; weather, cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | | 57 |
| 0 | 28.17 | 34.39 | 0.46 | 21.90 | 0 | 28.17 | 34.39 | 0.46 | 21.90 | 592 | 0.00 |
| 10 | 27.96 | 34.42 | 0.48 | 21.99 | 10 | 27.96 | 34.42 | 0.48 | 21.99 | 584 | 0.06 |
| 24 | 27.98 | 34.73 | 0.55 | 22.22 | 20 | 27.97 | 34.52 | 0.52 | 22.07 | 577 | 0.12 |
| 48 | 27.93 | 34.78 | 0.66 | 22.27 | 30 | 27.96 | 34.74 | 0.60 | 22.23 | 561 | 0.17 |
| 95 | 25.98 | 34.91 | 0.78 | 22.99 | 50 | 27.92 | 34.78 | 0.67 | 22.28 | 557 | 0.29 |
| 141a) | 19.20 | 34.71 | 1.44 | 24.76 | 75 | 27.89 | 34.80 | 0.67 | 22.30 | 554 | 0.43 |
| 186 | 10.94 | 34.70 | 2.68 | 26.57 | 100 | 25.10 | 34.88 | 0.85 | 23.24 | 464 | 0.55 |
| 230 | 10.12 | 34.69 | 2.69 | 26.71 | 150 | 13.42 | 34.60 | 2.01 | 26.02 | 200 | 0.72 |
| 275 | 9.62 | 34.69 | 2.62 | 26.79 | 200 | 10.58 | 34.69 | 2.70 | 26.63 | 142 | 0.81 |
| 321 | 9.28 | 34.67 | 2.79 | 26.83 | 250 | 9.89 | 34.69 | 2.67 | 26.75 | 130 | 0.88 |
| 367 | 8.90 | 34.66 | 2.83 | 26.89 | 300 | 9.44 | 34.68 | 2.71 | 26.81 | 124 | 0.95 |
| 415 | 8.57 | 34.65 | 2.80 | 26.93 | 400 | 8.68 | 34.66 | 2.81 | 26.92 | 114 | 1.08 |
| 465 | 8.17 | 34.61 | 2.96 | 26.96 | | | | | | | |
| HUGH M. SMITH; June 19, 1952; 1250 GCT; 6°47'N, 139°56'W; wind, 040°, 19 kt; weather, partly cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | | 58 |
| 0 | 27.77 | 34.70 | 0.44 | 22.27 | 0 | 27.77 | 34.70 | 0.44 | 22.27 | 558 | 0.00 |
| 10 | 27.75 | 34.66 | 0.46 | 22.24 | 10 | 27.75 | 34.66 | 0.46 | 22.24 | 560 | 0.06 |
| 25 | 27.75 | 34.70 | 0.44 | 22.27 | 20 | 27.75 | 34.68 | 0.45 | 22.26 | 558 | 0.11 |
| 49 | 27.56 | 34.73 | 0.45 | 22.36 | 30 | 27.73 | 34.70 | 0.45 | 22.28 | 556 | 0.17 |
| 97 | 13.60 | 34.61 | 1.88 | 25.99 | 50 | 27.55 | 34.73 | 0.45 | 22.36 | 549 | 0.28 |
| 145 | 11.28 | 34.72 | 2.51 | 26.52 | 75 | 20.40 | 34.75 | 1.18 | 24.48 | 346 | 0.39 |
| 192 | 10.12 | 34.72 | 2.48 | 26.73 | 100 | 13.42 | 34.61 | 1.92 | 26.02 | 199 | 0.46 |
| 240 | 9.70 | 34.76 | 2.63 | 26.83 | 150 | 11.19 | 34.72 | 2.51 | 26.54 | 150 | 0.55 |
| 288 | 9.38 | 34.70 | 2.63 | 26.84 | 200 | 10.02 | 34.72 | 2.51 | 26.75 | 130 | 0.62 |
| 336 | 9.09 | 34.69 | 2.64 | 26.88 | 250 | 9.64 | 34.76 | 2.63 | 26.84 | 122 | 0.69 |
| 384 | 8.84 | 34.68 | 2.72 | 26.91 | 300 | 9.27 | 34.70 | 2.63 | 26.86 | 120 | 0.75 |
| 432 | 8.44 | 34.66 | 2.73 | 26.96 | 400 | 8.74 | 34.67 | 2.73 | 26.92 | 114 | 0.88 |
| 482 | 8.10 | 34.64 | 2.81 | 27.00 | | | | | | | |
| HUGH M. SMITH; June 19, 1952; 2316 GCT; 8°00'N, 139°52'W; wind, 040°, 11 kt; weather, partly cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | | 59 |
| 2 | 27.29 | 34.40 | 0.50 | 22.20 | 0 | (27.29) | (34.40) | (0.50) | (22.20) | (564) | (0.00) |
| 12 | 27.18 | 34.43 | 0.54 | 22.25 | 10 | 27.19 | 34.43 | 0.52 | 22.25 | 559 | 0.06 |
| 27 | 27.10 | 34.83 | 0.56 | 22.58 | 20 | 27.13 | 34.63 | 0.54 | 22.42 | 543 | 0.11 |
| 52 | 13.84 | 34.52 | 2.36 | 25.87 | 30 | 27.06 | 34.83 | 0.56 | 22.59 | 526 | 0.16 |
| 101 | 11.92 | 34.79 | 2.88 | 26.46 | 50 | 14.02 | 34.52 | 2.29 | 25.83 | 218 | 0.24 |
| 150 | 10.92 | 34.71 | 2.83 | 26.58 | 75 | 12.52 | 34.70 | 2.81 | 26.27 | 176 | 0.29 |
| 198 | 10.15 | 34.68 | 2.80 | 26.70 | 100 | 11.98 | 34.79 | 2.88 | 26.45 | 159 | 0.33 |
| 246 | 9.70 | 34.69 | 2.85 | 26.78 | 150 | 10.92 | 34.71 | 2.83 | 26.58 | 146 | 0.41 |
| 294 | 9.36 | 34.63 | 2.88 | 26.79 | 200 | 10.14 | 34.68 | 2.79 | 26.70 | 135 | 0.48 |
| 342 | 8.98 | 34.64 | 2.94 | 26.86 | 250 | 9.67 | 34.69 | 2.85 | 26.79 | 127 | 0.55 |
| 391 | 8.58 | 34.62 | 3.05 | 26.91 | 300 | 9.28 | 34.63 | 2.88 | 26.80 | 125 | 0.62 |
| 439 | 8.18 | 34.60 | 3.12 | 26.95 | 400 | 8.52 | 34.61 | 3.06 | 26.91 | 116 | 0.74 |
| 488 | 7.74 | 34.59 | 3.24 | 27.01 | | | | | | | |
| HUGH M. SMITH; June 20, 1952; 0741 GCT; 9°00'N, 140°00'W; wind, 040°, 13 kt; weather, partly cloudy; sea, rough; wire angle, 02°. | | | | | | | | | | | 60 |
| 2 | 27.09 | 34.45 | 0.35 | 22.30 | 0 | (27.09) | (34.45) | (0.35) | (22.30) | (555) | (0.00) |
| 12 | 27.08 | 34.47 | 0.35 | 22.32 | 10 | 27.08 | 34.47 | 0.35 | 22.32 | 553 | 0.06 |
| 27 | 27.04 | 34.46 | 0.35 | 22.32 | 20 | 27.05 | 34.46 | 0.35 | 22.32 | 553 | 0.11 |
| 51 | 13.72 | 34.65 | 2.56 | 25.99 | 30 | 27.00 | 34.79 | 0.36 | 22.58 | 528 | 0.16 |
| 99 | 11.67 | 34.77 | 2.57 | 26.49 | 50 | 13.74 | 34.65 | 2.55 | 25.99 | 203 | 0.24 |
| 147 | 10.94 | 34.73 | 2.55 | 26.59 | 75 | 12.20 | 34.76 | 2.55 | 26.38 | 165 | 0.28 |
| 195 | 10.44 | 34.72 | 2.59 | 26.68 | 100 | 11.64 | 34.77 | 2.55 | 26.50 | 154 | 0.33 |
| 243 | 10.12 | 34.70 | 2.67 | 26.72 | 150 | 10.89 | 34.73 | 2.54 | 26.61 | 144 | 0.40 |
| 292 | 9.75 | 34.67 | 2.75 | 26.74 | 200 | 10.41 | 34.72 | 2.60 | 26.68 | 137 | 0.47 |
| 340 | 9.32 | 34.67 | 2.86 | 26.83 | 250 | 10.09 | 34.70 | 2.67 | 26.72 | 133 | 0.54 |
| 388 | 8.82 | 34.61 | 2.91 | 26.86 | 300 | 9.69 | 34.67 | 2.75 | 26.77 | 128 | 0.61 |
| 438 | 8.31 | 34.61 | 3.01 | 26.94 | 400 | 8.70 | 34.61 | 2.94 | 26.88 | 118 | 0.74 |
| 488 | 7.90 | 34.57 | 3.10 | 26.97 | | | | | | | |



a) Temperature value not in agreement with the bathythermograph observation; omitted from T-S curve.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | ΔD | |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m | |
| HUGH M. SMITH; July 27, 1952; 1425 GCT; 11°56'N, 150°09'W; wind, 060°, 22 kt; weather, missing; sea, moderate; wire angle, 41°. | | | | | | | | | | | | 1 |
| 4 | 26.12 | 34.64 | 0.29 | 22.75 | 0 | (26.12) | (34.64) | (0.29) | (22.75) | (512) | (0.00) | |
| 37 | 25.96 | 34.71 | 0.32 | 22.85 | 10 | 26.12 | 34.64 | 0.29 | 22.75 | 512 | 0.05 | |
| 55 | 25.37 | 34.69 | 0.36 | 23.02 | 20 | 26.10 | 34.65 | 0.29 | 22.76 | 510 | 0.10 | |
| 73 | 24.06 | 34.64 | 0.35 | 23.37 | 30 | 25.98 | 34.70 | 0.31 | 22.83 | 504 | 0.15 | |
| 91 | 22.20 | 34.95 | 0.34 | 24.14 | 50 | 25.47 | 34.70 | 0.35 | 22.99 | 488 | 0.25 | |
| 108 | 20.02 | 34.78 | 0.45 | 24.61 | 75 | 24.00 | 34.65 | 0.35 | 24.15 | 377 | 0.36 | |
| 127 | 15.95 | 34.43 | 1.14a) | 25.34 | 100 | 21.52 | 34.92 | 0.35 | 24.31 | 362 | 0.46 | |
| 144 | 13.56 | 34.51 | 2.40 | 25.92 | 150 | 13.22 | 34.55 | 2.55 | 26.02 | 200 | 0.60 | |
| 161 | 12.63 | 34.63 | 2.68 | 26.20 | 200 | 11.67 | 34.76 | 2.63 | 26.48 | 156 | 0.69 | |
| 179 | 12.06 | 34.74 | 2.68 | 26.40 | 250 | 11.13 | 34.70 | 2.64 | 26.54 | 151 | 0.77 | |
| 216 | 11.45 | 34.76 | 2.60 | 26.52 | | | | | | | | |
| 255 | 11.04 | 34.70 | 2.62b) | 26.55 | | | | | | | | |
| 295 | 10.70c) | 34.73 | 2.64c) | 26.64c) | | | | | | | | |
| HUGH M. SMITH; July 27, 1952; 2306 GCT; 11°00'N, 150°00'W; wind, 070°, 23 kt; weather, moderate to heavy rain showers; sea, rough; wire angle, 30°. | | | | | | | | | | | | 2 |
| 5 | 27.29 | - | 0.39 | | 0 | (27.29) | (34.28) | (0.39) | (22.11) | (573) | (0.00) | |
| 44 | 25.72 | 34.77 | 0.41 | 22.97 | 10 | 27.26 | (34.31) | 0.39 | (22.14) | (570) | (0.06) | |
| 66 | 25.17 | 34.70 | 0.36 | 23.09 | 20 | 27.20 | (34.34) | 0.39 | (22.18) | (566) | (0.11) | |
| 87 | 22.34 | 34.89 | 0.36 | 24.06 | 30 | 26.93 | (34.45) | 0.40 | (22.34) | (550) | (0.17) | |
| 109 | 19.62 | 34.79 | 0.59 | 24.72 | 50 | 25.20 | 34.70 | 0.36 | 23.07 | 480 | 0.27 | |
| 131 | 16.18 | 34.45 | 1.20 | 25.30 | 75 | 24.60 | 34.66 | 0.35 | 23.23 | 466 | 0.39 | |
| 153 | 13.34 | 34.52 | 2.34 | 25.97 | 100 | 20.77 | 34.89 | 0.44 | 24.49 | 345 | 0.50 | |
| 175 | 12.63 | - | 2.64 | | 150 | 13.49 | 34.48 | 2.28 | 25.91 | 210 | 0.64 | |
| 198 | 11.94 | 34.73 | 2.68 | 26.41 | 200 | 11.86 | 34.73 | 2.68 | 26.43 | 161 | 0.73 | |
| 220 | 11.44 | - | 2.31d) | | 250 | 11.05 | 34.76 | 2.67 | 26.60 | 145 | 0.81 | |
| 264 | 10.87 | 34.76 | 2.66 | 26.63 | 300 | 10.46 | 34.71 | 2.67 | 26.66 | 139 | 0.88 | |
| 310 | 10.36 | 34.70 | 2.67 | 26.67 | | | | | | | | |
| 356 | 9.92e) | 34.71 | 2.66e) | 26.76e) | | | | | | | | |
| HUGH M. SMITH; July 28, 1952; 0807 GCT; 10°01'N, 150°03'W; wind, 070°, 10 kt; weather, missing; sea, moderate; wire angle, 30°. | | | | | | | | | | | | 3 |
| 4 | 27.37 | 34.25 | 0.42 | 22.05 | 0 | (27.37) | (34.25) | (0.42) | (22.05) | (578) | (0.00) | |
| 41 | 25.64 | 34.70 | 0.43 | 22.94 | 10 | 27.37 | 34.25 | 0.42 | 22.05 | 578 | 0.06 | |
| 62 | 24.58 | 34.63 | 0.38 | 23.21 | 20 | 27.27 | 34.28 | 0.42 | 22.08 | 576 | 0.12 | |
| 82 | 21.54 | 34.89 | 0.43 | 24.28 | 30 | 27.13 | 34.34 | 0.42 | 22.20 | 564 | 0.17 | |
| 103 | 17.67 | 34.54 | 1.03 | 25.02 | 50 | 24.78 | 34.63 | 0.39 | 23.15 | 473 | 0.28 | |
| 123 | 14.08 | 34.39 | 2.07 | 25.72 | 75 | 22.78 | 34.79 | 0.39 | 23.86 | 405 | 0.39 | |
| 143 | 13.01 | 34.65 | 2.63 | 26.14 | 100 | 17.97 | 34.57 | 0.96 | 24.97 | 299 | 0.48 | |
| 164 | 12.31 | 34.71 | 2.80 | 26.32 | 150 | 13.01 | 34.76 | 2.64 | 26.22 | 180 | 0.60 | |
| 184 | 11.66 | 34.70 | 2.71f) | 26.44 | 200 | 11.37 | 34.20 | 2.80 | 26.49 | 155 | 0.68 | |
| 204 | 11.34 | 34.70 | 2.77g) | 26.50 | 250 | 10.78 | 34.70 | 2.81 | 26.60 | 144 | 0.76 | |
| 245 | 10.82 | 34.70 | 2.81 | 26.59 | 300 | 10.15 | 34.68 | 2.82 | 26.70 | 135 | 0.84 | |
| 288 | 10.30 | 34.68 | 2.81 | 26.67 | | | | | | | | |
| 332 | 9.82 | 34.67 | 2.88h) | 26.74 | | | | | | | | |

a) Duplicate value, 1.18 µg at/L. Duplicate phosphate values are reported when duplicate determinations of inorganic phosphate differ in extinction value by more than 0.01 (approximately 0.04 µg at/L).
b) Duplicate value, 2.67 µg at/L.
c) Duplicate values: temperature, 10.70°C; sigma-t, 26.64 g/L; phosphate, 2.64 µg at/L. When the corrected paired reversing thermometer readings differed by more than 0.1°C above 300 meters, or 0.5°C below 300 meters, both temperatures are reported. Sigma-t values calculated from each temperature are also reported.
d) Both values appear anomalous.
e) Duplicate values: temperature, 9.86°C; sigma-t, 26.77 g/L; phosphate, 2.61 µg at/L.
f) Duplicate value, 2.80 µg at/L.
g) Duplicate value, 2.84 µg at/L.
h) Duplicate value, 2.83 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **4** | HUGH M. SMITH; July 28, 1952; 1653 GCT; 9°05'N, 150°06'W; wind, 160°, 16 kt; weather, cloudy; sea, moderate; wire angle, 16°. | | | | | | | | | | |
| 5 | 27.74 | 34.42 | 0.37 | 22.06 | 0 | (27.74) | (34.42) | (0.37) | (22.06) | (577) | (0.00) |
| 47 | 25.85 | 34.66 | 0.37 | 22.84 | 10 | 27.70 | 34.42 | 0.37 | 22.08 | 576 | 0.06 |
| 71 | 21.80 | 34.60 | 0.43 | 23.99 | 20 | 27.63 | 34.43 | 0.37 | 22.11 | 573 | 0.12 |
| 94 | 15.96 | 34.38 | 1.08a) | 25.30 | 30 | 27.45 | 34.47 | 0.37 | 22.20 | 564 | 0.17 |
| 117 | 12.98 | 34.49 | 2.44 | 26.02 | 50 | 25.73 | 34.66 | 0.37 | 22.88 | 499 | 0.28 |
| 140 | 12.00 | 34.60 | 2.66 | 26.30 | 75 | 20.00 | 34.53 | 0.59 | 24.42 | 352 | 0.39 |
| 163 | 11.46 | 34.69 | 2.56 | 26.47 | 100 | 14.93 | 34.37 | 1.42 | 25.60 | 240 | 0.46 |
| 184 | 11.11 | 34.74 | 2.66 | 26.57 | 150 | 11.79 | 34.64 | 2.63 | 26.37 | 167 | 0.56 |
| 207 | 10.72 | 34.72 | 2.66 | 26.63 | 200 | 10.83 | 34.73 | 2.66 | 26.62 | 143 | 0.64 |
| 229 | 10.40 | 34.70 | 2.66 | 26.67 | 250 | 10.13 | 34.68 | 2.67 | 26.70 | 135 | 0.72 |
| 275 | 9.82 | 34.66 | 2.69 | 26.74 | 300 | 9.55 | 34.64 | 2.71 | 26.76 | 129 | 0.79 |
| 321 | 9.38 | 34.62 | 2.83b) | 26.78 | | | | | | | |
| 368c) | 9.36 | 34.60 | 2.73 | 26.76 | | | | | | | |
| **5** | HUGH M. SMITH; July 29, 1952; 0135 GCT; 8°06'N, 150°02'W; wind, 080°, 18 kt; weather, partly cloudy; sea, rough; wire angle, 01°. | | | | | | | | | | |
| 5 | 28.19 | 34.48 | 0.41 | 21.96 | 0 | (28.19) | (34.48) | (0.41) | (21.96) | (586) | (0.00) |
| 45 | 27.72 | 34.68 | 0.39 | 22.27 | 10 | 28.13 | 34.50 | 0.40 | 22.00 | 583 | 0.06 |
| 65 | 24.77 | 34.68 | 0.50 | 23.19 | 20 | 28.07 | 34.55 | 0.40 | 22.06 | 572 | 0.12 |
| 85 | 16.76 | 34.44 | 1.24 | 25.16 | 30 | 28.00 | 34.59 | 0.40 | 22.11 | 573 | 0.17 |
| 104 | 12.82 | 34.46 | 2.35d) | 26.03 | 50 | 27.57 | 34.69 | 0.39 | 22.33 | 552 | 0.29 |
| 124 | 12.15 | 34.71 | 2.74 | 26.35 | 75 | 22.40 | 34.64 | 0.70 | 23.85 | 406 | 0.41 |
| 148 | 11.57 | 34.77 | 2.68e) | 26.51 | 100 | 13.80 | 34.40 | 2.03 | 25.78 | 222 | 0.49 |
| 172 | 11.14 | 34.76 | 2.72 | 26.58 | 150 | 11.52 | 34.77 | 2.64 | 26.52 | 152 | 0.58 |
| 196 | 10.76 | 34.76 | 2.69f) | 26.65 | 200 | 10.67 | 34.76 | 2.64 | 26.67 | 138 | 0.66 |
| 243 | 10.24 | 34.74 | 2.69 | 26.73 | 250 | 10.18 | 34.74 | 2.70 | 26.74 | 131 | 0.73 |
| 291 | 9.78 | 34.74 | 2.75 | 26.80 | 300 | 9.70 | 34.74 | 2.74 | 26.82 | 124 | 0.79 |
| 340 | 9.42 | 34.70 | 2.73g) | 26.83 | | | | | | | |
| 389 | 8.96 | 34.68 | 2.79 | 26.89 | | | | | | | |
| **6** | HUGH M. SMITH; July 29, 1952; 1052 GCT; 7°08'N, 149°58'W; wind, 090°, 17 kt; weather, moderate to heavy rain showers; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 5 | 28.16 | 34.86 | 0.48 | 22.26 | 0 | (28.16) | (34.86) | (0.48) | (22.26) | (558) | (0.00) |
| 45 | 28.20 | 34.91 | 0.49 | 22.28 | 10 | 28.17 | 34.87 | 0.48 | 22.26 | 558 | 0.06 |
| 65 | 28.20 | 34.91 | 0.46 | 22.28 | 20 | 28.18 | 34.88 | 0.48 | 22.27 | 557 | 0.11 |
| 84 | 28.08 | 34.89 | 0.51h) | 22.31 | 30 | 28.19 | 34.88 | 0.49 | 22.26 | 558 | 0.17 |
| 104 | 23.15 | 34.74 | 0.81 | 23.72 | 50 | 28.20 | 34.91 | 0.47 | 22.28 | 556 | 0.28 |
| 123 | 17.70 | 34.54 | 1.12 | 25.01 | 75 | 28.20 | 34.91 | 0.46 | 22.28 | 556 | 0.42 |
| 147 | 13.06 | 34.47 | 2.22 | 25.99 | 100 | 24.20 | 34.77 | 0.74 | 23.43 | 446 | 0.54 |
| 172 | 11.52 | 34.65 | 2.65 | 26.42 | 150 | 12.70 | 34.50 | 2.36 | 26.08 | 194 | 0.71 |
| 196 | 10.86 | 34.70 | 2.63 | 26.58 | 200 | 10.80 | 34.70 | 2.63 | 26.60 | 145 | 0.80 |
| 244 | 10.08 | 34.70 | 2.72i) | 26.72 | 250 | 10.01 | 34.70 | 2.69 | 26.73 | 132 | 0.87 |
| 291 | 9.58 | 34.70 | 2.65 | 26.81 | 300 | 9.47 | 34.69 | 2.65 | 26.82 | 124 | 0.93 |
| 340 | 9.09 | 34.66 | 2.69j) | 26.86 | | | | | | | |
| 388 | 8.72 | 34.63 | 2.77k) | 26.89 | | | | | | | |

a) Duplicate value, 1.02 µg at/L.
b) Duplicate value, 2.73 µg at/L.
c) Suspected pretrip.
d) Duplicate value, 2.31 µg at/L.
e) Duplicate value, 2.60 µg at/L.
f) Duplicate value, 2.59 µg at/L.
g) Duplicate value, 2.78 µg at/L.
h) Duplicate value, 0.46 µg at/L.
i) Duplicate value, 2.67 µg at/L.
j) Duplicate value, 2.63 µg at/L.
k) Duplicate value, 2.71 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| HUGH M. SMITH; July 29, 1952; 1943 GCT; 6°10'N, 149°49'W; wind, 130°, 20 kt; weather, overcast; sea, rough; wire angle, 30°. | | | | | | | | | | | 7 |
| 4 | 27.94 | 34.95 | 0.50 | 22.40 | 0 | (27.94) | (34.95) | (0.50) | (22.40) | (545) | (0.00) |
| 59 | 27.80 | 35.00 | 0.55a) | 22.48 | 10 | 27.93 | 34.95 | 0.51 | 22.40 | 545 | 0.06 |
| 77 | 26.98 | 35.15 | 0.60 | 22.86 | 20 | 27.90 | 34.95 | 0.53 | 22.41 | 544 | 0.11 |
| 92 | 26.65 | 35.15 | 0.65 | 22.96 | 30 | 27.87 | 34.97 | 0.55 | 22.44 | 541 | 0.16 |
| 106 | 26.42 | 35.15 | 0.70 | 23.04 | 50 | 27.81 | 34.99 | 0.56 | 22.47 | 538 | 0.27 |
| 119 | 25.54 | 35.02 | 0.87 | 23.21 | 75 | 27.03 | 35.14 | 0.59 | 22.84 | 503 | 0.40 |
| 138 | 22.60 | 34.87 | 0.91 | 23.97 | 100 | 26.52 | 35.15 | 0.67 | 23.01 | 487 | 0.53 |
| 161 | 16.42 | 34.67 | 1.41 | 25.42 | 150 | 18.40 | 34.74 | 1.21 | 24.99 | 296 | 0.73 |
| 183 | 13.40 | 34.62 | 1.99 | 26.04 | 200 | 12.00 | 34.68 | 2.62 | 26.36 | 167 | 0.84 |
| 229 | 11.02 | 34.71 | 2.73 | 26.57 | 250 | 10.46 | 34.71 | 2.71 | 26.66 | 139 | 0.92 |
| 275 | 9.82 | 34.71 | 2.67 | 26.77 | 300 | 9.47 | 34.69 | 2.65 | 26.82 | 124 | 0.99 |
| 321 | 9.28 | 34.67 | 2.63 | 26.83 | | | | | | | |
| 368 | 8.96 | 34.64 | 2.68b) | 26.86 | | | | | | | |
| HUGH M. SMITH; July 30, 1952; 0511 GCT; 5°06'N, 149°51'W; wind, 120°, 18 kt; weather, partly cloudy; sea, rough; wire angle, 06°. | | | | | | | | | | | 8 |
| 5 | 27.53 | 34.87 | 0.55 | 22.47 | 0 | (27.53) | (34.87) | (0.55) | (22.47) | (538) | (0.00) |
| 58 | 27.46 | 34.88 | 0.55 | 22.50 | 10 | 27.53 | 34.87 | 0.55 | 22.47 | 538 | 0.05 |
| 97 | 27.10 | 35.05 | 0.54 | 22.74 | 20 | 27.52 | 34.87 | 0.55 | 22.47 | 538 | 0.11 |
| 116 | 27.08 | 35.03 | 0.62 | 22.74 | 30 | 27.52 | 34.87 | 0.55 | 22.48 | 538 | 0.16 |
| 135 | 25.76 | 34.95 | 0.81 | 23.09 | 50 | 27.48 | 34.88 | 0.55 | 22.49 | 536 | 0.27 |
| 154 | 20.44 | 34.83 | 1.25 | 24.53 | 75 | 27.25 | 35.05 | 0.53 | 22.70 | 516 | 0.40 |
| 173 | 15.13 | 34.68 | 1.64c) | 25.72 | 100 | 27.10 | 35.03 | 0.54 | 22.73 | 513 | 0.53 |
| 196 | 12.30 | 34.60 | 2.09 | 26.24 | 150 | 22.82 | 34.89 | 1.06 | 23.92 | 399 | 0.76 |
| 221 | 10.59 | 34.64 | 2.28 | 26.59 | 200 | 12.06 | 34.60 | 2.12 | 26.29 | 174 | 0.91 |
| 246 | 9.89 | 34.66 | 2.42d) | 26.72 | 250 | 9.80 | 34.66 | 2.46 | 26.74 | 131 | 0.99 |
| 293 | 9.28 | 34.66 | 2.47 | 26.83 | 300 | 9.22 | 34.66 | 2.47 | 26.82 | 124 | 1.06 |
| 343 | 9.00 | 34.69 | 2.47 | 26.90 | | | | | | | |
| 392 | 8.78 | 34.66 | 2.46 | 26.91 | | | | | | | |
| HUGH M. SMITH; July 30, 1952; 1104 GCT; 4°34'N, 149°51'W; wind, 110°, 16 kt; weather, missing; sea, rough; wire angle, 12°. | | | | | | | | | | | 9 |
| 5 | 27.60 | 34.82 | 0.57 | 22.41 | 0 | (27.60) | (34.82) | (0.57) | (22.41) | (544) | (0.00) |
| 60 | 27.59 | 34.81 | 0.57 | 22.41 | 10 | 27.60 | 34.81 | 0.57 | 22.40 | 544 | 0.05 |
| 97 | 27.21 | 34.88 | 0.61 | 22.58 | 20 | 27.60 | 34.81 | 0.57 | 22.40 | 544 | 0.11 |
| 116 | 26.80 | 34.90 | 0.79 | 22.73 | 30 | 27.60 | 34.81 | 0.57 | 22.40 | 544 | 0.16 |
| 135 | 24.88 | 34.92 | 0.97 | 23.34 | 50 | 27.59 | 34.81 | 0.57 | 22.41 | 544 | 0.27 |
| 153 | 18.42 | 34.76 | 1.34 | 25.00 | 75 | 27.41 | 34.86 | 0.58 | 22.50 | 535 | 0.41 |
| 173 | 14.54 | 34.64 | 1.78 | 25.81 | 100 | 27.19 | 34.88 | 0.62 | 22.59 | 527 | 0.54 |
| 192 | 12.80 | 34.61 | 2.05e) | 26.15 | 150 | 22.40 | 34.81 | 1.22 | 23.98 | 394 | 0.78 |
| 215 | 10.96 | 34.62 | 2.17 | 26.51 | 200 | 12.40 | 34.60 | 2.05 | 26.22 | 181 | 0.92 |
| 239 | 9.97 | 34.68 | 2.36 | 26.73 | 250 | 9.74 | 34.69 | 2.40 | 26.77 | 128 | 1.00 |
| 287 | 9.39 | 34.70 | 2.48 | 26.84 | 300 | 9.34 | 34.70 | 2.49 | 26.84 | 121 | 1.07 |
| 335 | 9.27 | 34.69 | 2.52 | 26.85 | | | | | | | |
| 385 | 8.88 | 34.69 | 2.59 | 26.92 | | | | | | | |

a) Duplicate value, 0.59 µg at/L.
b) Duplicate value, 2.60 µg at/L.
c) Duplicate value, 1.59 µg at/L.
d) Duplicate value, 2.49 µg at/L.
e) Duplicate value, 1.99 µg at/L.

HBL

HMS-16

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **10** | HUGH M. SMITH; July 30, 1952; 1658 GCT; 4°02'N, 149°52'W; wind, 120°, 17 kt; weather, partly cloudy; sea, rough; wire angle, 28°. | | | | | | | | | | |
| 4 | 27.60 | 34.80 | 0.51 | 22.40 | 0 | (27.60) | (34.80) | (0.51) | (22.40) | (545) | (0.00) |
| 52 | 27.61 | 34.80 | 0.54a) | 22.39 | 10 | 27.60 | 34.80 | 0.51 | 22.40 | 545 | 0.06 |
| 86 | 27.38 | 34.84 | 0.53 | 22.50 | 20 | 27.60 | 34.80 | 0.51 | 22.40 | 545 | 0.11 |
| 102 | 26.70 | 34.85 | 0.73 | 22.72 | 30 | 27.60 | 34.80 | 0.51 | 22.40 | 545 | 0.16 |
| 119 | 25.68 | 34.88 | 0.81 | 23.06 | 50 | 27.62 | 34.80 | 0.51 | 22.39 | 546 | 0.27 |
| 135 | 22.62 | 34.88 | 1.11 | 23.97 | 75 | 27.59 | 34.82 | 0.52 | 22.41 | 544 | 0.41 |
| 152 | 15.26 | 34.67 | 1.56 | 25.68 | 100 | 27.72 | 34.85 | 0.73 | 22.39 | 545 | 0.55 |
| 169 | 14.48 | 34.65 | 1.70 | 25.83 | 150 | 16.40 | 34.71 | 1.45 | 25.45 | 254 | 0.75 |
| 189 | 12.20 | 34.60 | 1.87 | 26.26 | 200 | 11.38 | 34.63 | 1.94 | 26.43 | 160 | 0.86 |
| 210 | 10.96 | 34.65 | 2.01 | 26.53 | 250 | 10.07 | 34.70 | 2.25 | 26.72 | 133 | 0.94 |
| 251 | 10.04 | 34.70 | 2.27 | 26.73 | 300 | 9.72 | 34.71 | 2.37 | 26.79 | 127 | 1.01 |
| 294 | 9.76 | 34.71 | 2.37 | 26.78 | | | | | | | |
| 336 | 9.50 | 34.69 | 2.40 | 26.81 | | | | | | | |
| **11** | HUGH M. SMITH; July 30, 1952; 2240 GCT; 3°32'N, 149°53'W; wind, 100°, 19 kt; weather, partly cloudy; sea, rough; wire angle, 40°. | | | | | | | | | | |
| 4 | 27.67 | 34.81 | 0.57 | 22.38 | 0 | (27.67) | (34.81) | (0.57) | (22.38) | (547) | (0.00) |
| 46 | 27.60 | 34.80 | 0.57 | 22.40 | 10 | 27.66 | 34.81 | 0.57 | 22.38 | 546 | 0.06 |
| 76 | 27.45 | 34.81 | 0.59 | 22.45 | 20 | 27.65 | 34.80 | 0.57 | 22.38 | 547 | 0.11 |
| 90 | 26.84 | 34.90 | 0.74 | 22.72 | 30 | 27.63 | 34.80 | 0.57 | 22.39 | 546 | 0.16 |
| 105 | 26.86 | 34.99 | 0.70 | 22.78 | 50 | 27.59 | 34.80 | 0.57 | 22.40 | 545 | 0.27 |
| 118 | 25.82 | 34.94 | 0.93 | 23.06 | 75 | 27.42 | 34.81 | 0.59 | 22.46 | 539 | 0.41 |
| 130 | 23.08 | 34.92 | 1.14b) | 23.87 | 100 | 26.86 | 34.95 | 0.72 | 22.75 | 512 | 0.54 |
| 144 | 20.65 | 34.87 | 1.41c) | 24.51 | 150 | 19.45 | 34.84 | 1.43 | 24.80 | 316 | 0.75 |
| 160 | 16.60 | 34.76 | 1.57 | 25.44 | 200 | 11.00 | 34.70 | 2.09 | 26.56 | 148 | 0.87 |
| 175 | 12.44 | 34.64 | 1.96d) | 26.24 | 250 | 10.42 | 34.70 | 2.20 | 26.66 | 138 | 0.95 |
| 208 | 10.86 | 34.70 | 2.11 | 26.59 | | | | | | | |
| 242 | 10.45 | 34.71 | 2.19 | 26.67 | | | | | | | |
| 282 | 10.41 | 34.76 | 2.33e) | 26.71 | | | | | | | |
| **12** | HUGH M. SMITH; July 31, 1952; 0427 GCT; 3°02'N, 149°59'W; wind, 120°, 19 kt; weather, partly cloudy; sea, rough; wire angle, 43°. | | | | | | | | | | |
| 4 | 27.47 | 34.84 | 0.54 | 22.47 | 0 | (27.47) | (34.84) | (0.54) | (22.47) | (538) | (0.00) |
| 45 | 27.43 | 34.85 | 0.57f) | 22.49 | 10 | 27.47 | 34.85 | 0.55 | 22.48 | 537 | 0.05 |
| 72 | 27.31 | 34.86 | 0.56 | 22.54 | 20 | 27.47 | 34.85 | 0.55 | 22.48 | 537 | 0.11 |
| 97 | 26.72 | 35.05 | 0.69 | 22.87 | 30 | 27.47 | 34.85 | 0.55 | 22.48 | 537 | 0.16 |
| 110 | 26.72 | 35.06 | 0.83 | 22.87 | 50 | 27.42 | 34.85 | 0.55 | 22.49 | 536 | 0.27 |
| 121 | 26.52 | 35.08 | 0.76 | 22.95 | 75 | 27.30 | 34.86 | 0.56 | 22.54 | 532 | 0.40 |
| 133 | 23.03 | 34.87 | 1.08 | 23.85 | 100 | 26.72 | 35.05 | 0.72 | 22.87 | 500 | 0.53 |
| 146 | 17.78 | 34.79 | 1.48 | 25.18 | 150 | 15.80 | 34.72 | 1.58 | 25.60 | 240 | 0.72 |
| 158 | 13.98 | 34.64 | 1.71 | 25.93 | 200 | 11.45 | 34.77 | 2.02 | 26.53 | 151 | 0.82 |
| 171 | 13.10 | 34.61 | 1.78 | 26.09 | | | | | | | |
| 197 | 11.46 | 34.77 | 2.03 | 26.53 | | | | | | | |
| 234g) | 11.18 | 34.80 | - | 26.60 | | | | | | | |

a) Duplicate value, 0.50 µg at/L.
b) Duplicate value, 1.09 µg at/L.
c) Duplicate value, 1.33 µg at/L.
d) Duplicate value, 2.04 µg at/L.
e) Duplicate value, 2.28 µg at/L.
f) Duplicate value, 0.53 µg at/L.
g) Nansen bottle pretripped below 234 meters.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| HUGH M. SMITH; July 31, 1952; 1015 GCT; 2°30'N, 150°02'W; wind, 100°, 18 kt; weather, missing; sea, moderate; wire angle, 43°. | | | | | | | | | | | 13 |
| 4 | 27.40 | 34.89 | 0.58 | 22.53 | 0 | (27.40) | (34.89) | (0.58) | (22.53) | (532) | (0.00) |
| 43 | 27.40 | 34.93 | 0.57 | 22.56 | 10 | 27.40 | 34.90 | 0.57 | 22.54 | 532 | 0.05 |
| 71 | 26.86 | 35.01 | 0.66a) | 22.79 | 20 | 27.40 | 34.90 | 0.57 | 22.54 | 532 | 0.11 |
| 96 | 26.52 | 35.13 | 0.70 | 22.99 | 30 | 27.40 | 34.91 | 0.57 | 22.54 | 531 | 0.16 |
| 108 | 26.25 | 35.01 | 0.74 | 22.98 | 50 | 27.39 | 34.93 | 0.57 | 22.56 | 529 | 0.27 |
| 121 | 24.40 | 34.85 | 0.98 | 23.43 | 75 | 28.82 | 35.02 | 0.65 | 22.16 | 568 | 0.40 |
| 133 | 21.02 | 34.86 | 1.26b) | 24.40 | 100 | 26.43 | 35.11 | 0.71 | 23.00 | 488 | 0.54 |
| 147 | 17.08 | 34.74 | 1.47 | 25.31 | 150 | 17.01 | 34.74 | 1.48 | 25.33 | 265 | 0.73 |
| 160 | 16.09 | 34.74 | 1.54 | 25.55 | 200 | 11.61 | 34.86 | 2.35 | 26.57 | 147 | 0.83 |
| 174 | 12.06 | - | - | | 250 | 11.10 | 34.81 | 2.16 | 26.63 | 142 | 0.91 |
| 203 | 11.57 | 34.86 | 2.31c) | 26.58 | | | | | | | |
| 238 | 11.14 | 34.81 | 2.10 | 26.62 | | | | | | | |
| 277 | 11.04 | 34.80 | 2.30 | 26.63 | | | | | | | |
| HUGH M. SMITH; July 31, 1952; 1602 GCT; 1°57'N, 150°07'W; wind, 110°, 17 kt; weather, slight rain showers; sea, moderate; wire angle, 45°. | | | | | | | | | | | 14 |
| 4 | 27.26 | 34.93 | 0.51 | 22.60 | 0 | (27.26) | (34.93) | (0.51) | (22.60) | (525) | (0.00) |
| 41 | 27.26 | 34.92 | 0.51 | 22.60 | 10 | 27.26 | 34.93 | 0.51 | 22.60 | 525 | 0.05 |
| 66 | 26.84 | 35.01 | 0.57 | 22.80 | 20 | 27.26 | 34.93 | 0.51 | 22.60 | 525 | 0.10 |
| 89 | 26.42 | 35.03 | 0.68 | 22.94 | 30 | 27.26 | 34.93 | 0.51 | 22.60 | 525 | 0.16 |
| 99 | 25.42 | 34.94 | 0.82 | 23.19 | 50 | 26.23 | 34.93 | 0.51 | 22.93 | 494 | 0.26 |
| 110 | 24.66 | 34.99 | 0.84 | 23.46 | 75 | 26.64 | 35.05 | 0.62 | 22.89 | 498 | 0.38 |
| 122 | 22.54 | 34.90 | 0.93 | 24.01 | 100 | 24.82 | 34.98 | 0.84 | 23.40 | 449 | 0.50 |
| 135 | 17.70 | 34.73 | 1.30 | 25.16 | 150 | 15.50 | 34.67 | 1.45 | 25.63 | 237 | 0.68 |
| 147 | 15.72 | 34.68 | 1.43 | 25.58 | 200 | 11.60 | 34.84 | 2.29 | 26.50 | 149 | 0.78 |
| 160 | 13.76 | 34.63 | 1.59d) | 25.97 | 250 | 11.15 | 34.77 | 2.12 | 26.59 | 146 | 0.85 |
| 188 | 11.87 | 34.83 | 2.28 | 26.50 | | | | | | | |
| 226 | 11.28 | 34.77 | 2.09 | 26.56 | | | | | | | |
| 266 | 11.08 | 34.77 | 2.14 | 26.60 | | | | | | | |
| HUGH M. SMITH; July 31, 1952; 2203 GCT; 1°24'N, 149°57'W; wind, 130°, 21 kt; weather, partly cloudy; sea, moderate; wire angle, 52°. | | | | | | | | | | | 15 |
| 4 | 27.29 | 34.94 | 0.57 | 22.60 | 0 | (27.29) | (34.94) | (0.57) | (22.60) | (525) | (0.00) |
| 30 | 27.14 | 34.94 | 0.59 | 22.65 | 10 | 27.25 | 34.94 | 0.58 | 22.62 | 524 | 0.05 |
| 43 | 26.68 | 35.06 | 0.59 | 22.88 | 20 | 27.20 | 34.94 | 0.58 | 22.63 | 523 | 0.10 |
| 55 | 26.59 | 35.04 | 0.65 | 22.90 | 30 | 27.14 | 34.94 | 0.59 | 22.64 | 521 | 0.16 |
| 65 | 26.50 | 35.05 | 0.68 | 22.94 | 50 | 26.60 | 35.04 | 0.64 | 22.90 | 496 | 0.26 |
| 75 | 26.06 | 35.06 | 0.78 | 23.08 | 75 | 26.06 | 35.06 | 0.78 | 23.08 | 479 | 0.38 |
| 87 | 25.88 | 35.05 | 0.71 | 23.13 | 100 | 24.28 | 35.05 | 0.85 | 23.61 | 430 | 0.50 |
| 97 | 24.68 | 35.07 | 0.85 | 23.51 | 150 | 14.74 | 34.68 | 1.49 | 25.80 | 221 | 0.66 |
| 109 | 23.30 | 35.00 | 0.87 | 23.87 | 200 | 11.60 | 34.76 | 2.06 | 26.50 | 154 | 0.76 |
| 121 | 21.32 | 34.90 | 1.03 | 24.35 | | | | | | | |
| 147 | 14.92 | 34.69 | 1.47 | 25.77 | | | | | | | |
| 177 | 11.96 | 34.69 | 1.81 | 26.38 | | | | | | | |
| 211 | 11.52e) | 34.80 | 2.19 | 26.54e) | | | | | | | |

a) Duplicate value, 0.62 µg at/L.
b) Duplicate value, 1.21 µg at/L.
c) Duplicate value, 2.40 µg at/L.
d) Duplicate value, 1.65 µg at/L.
e) Duplicate values: temperature, 11.46°C; sigma-t, 26.55 g/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **16** | HUGH M. SMITH; August 1, 1952; 0317 GCT; 0°57'N, 150°01'W; wind, 100°, 16 kt; weather, partly cloudy; sea, moderate; wire angle, 58°. | | | | | | | | | | |
| 3 | 27.03 | 35.03 | 0.59 | 22.75 | 0 | (27.03) | (35.03) | (0.59) | (22.75) | (511) | (0.00) |
| 27 | 26.91 | 35.02 | 0.63 | 22.78 | 10 | 27.01 | 35.02 | 0.60 | 22.75 | 511 | 0.05 |
| 51 | 26.50 | 35.05 | 0.82 | 22.94 | 20 | 26.96 | 35.02 | 0.62 | 22.77 | 510 | 0.10 |
| 71 | 26.08 | 35.12 | 0.78 | 23.12 | 30 | 26.89 | 35.02 | 0.65 | 22.79 | 508 | 0.15 |
| 82 | 25.76 | 35.12 | 0.75 | 23.22 | 50 | 26.50 | 35.05 | 0.82 | 22.94 | 494 | 0.25 |
| 90 | 25.32 | 35.14 | 0.80 | 23.37 | 75 | 25.98 | 35.12 | 0.76 | 23.15 | 473 | 0.38 |
| 100 | 23.94 | 35.08 | 0.83 | 23.74 | 100 | 23.94 | 35.08 | 0.83 | 23.74 | 417 | 0.49 |
| 110 | 20.46 | 34.91 | 1.10a) | 24.59 | 150 | 14.58 | 34.74 | 1.49 | 25.88 | 213 | 0.65 |
| 120 | 18.94 | 34.88 | 1.13 | 24.96 | 200 | 12.12 | 34.72 | 1.82 | 26.37 | 167 | 0.74 |
| 132 | 17.80 | 34.87 | 1.16b) | 25.24 | | | | | | | |
| 157 | 14.22 | 34.72 | 1.52 | 25.94 | | | | | | | |
| 184 | 12.20 | 34.71 | 1.80 | 26.34 | | | | | | | |
| 248 | 11.32 | 34.80 | 2.12 | 26.58 | | | | | | | |
| **17** | HUGH M. SMITH; August 1, 1952; 0857 GCT; 0°28'N, 150°01'W; wind, 090°, 18 kt; weather, partly cloudy; sea, moderate; wire angle, 57°. | | | | | | | | | | |
| 4 | 26.48 | 35.08 | 0.70c) | 22.96 | 0 | (26.48) | (35.08) | (0.67) | (22.96) | (491) | (0.00) |
| 28 | 26.43 | 35.08 | 0.67 | 22.98 | 10 | 26.47 | 35.08 | 0.67 | 22.97 | 490 | 0.05 |
| 52 | 26.03 | 35.14 | 0.67 | 23.15 | 20 | 26.46 | 35.08 | 0.67 | 22.97 | 490 | 0.10 |
| 73 | 25.38 | 35.21 | 0.76 | 23.40 | 30 | 26.45 | 35.08 | 0.67 | 22.97 | 490 | 0.15 |
| 82 | 24.97 | 35.20 | 0.78 | 23.52 | 50 | 26.07 | 35.13 | 0.67 | 23.13 | 475 | 0.24 |
| 89 | 24.24 | 35.19 | 0.86 | 23.73 | 75 | 25.23 | 35.21 | 0.77 | 23.45 | 445 | 0.36 |
| 99 | 22.41 | 35.10 | 0.94 | 24.20 | 100 | 22.10 | 35.10 | 0.96 | 24.29 | 365 | 0.46 |
| 108 | 20.94 | 35.12 | 1.03 | 24.62 | 150 | 15.70 | 35.00 | 1.44 | 25.83 | 217 | 0.61 |
| 121 | 17.34 | 35.03 | 1.26 | 25.47 | 200 | 12.70 | 34.89 | 1.75 | 26.39 | 165 | 0.71 |
| 134 | 17.24 | 35.14 | 1.32 | 25.58 | 250 | 11.97 | 34.85 | 1.90 | 26.50 | 154 | 0.79 |
| 162 | 14.38 | 34.91 | 1.55 | 26.05 | | | | | | | |
| 195 | 12.77 | 34.90 | 1.74 | 26.38 | | | | | | | |
| 271 | 11.64 | 34.82 | 1.99 | 26.53 | | | | | | | |
| **18** | HUGH M. SMITH; August 1, 1952; 1432 GCT; 0°06'S, 149°55'W; wind, 080°, 16 kt; weather, missing; sea, moderate; wire angle, 58°. | | | | | | | | | | |
| 4 | 26.22 | 35.16 | 0.66 | 23.11 | 0 | (26.22) | (35.16) | (0.66) | (23.11) | (477) | (0.00) |
| 28 | 26.18 | 35.16 | 0.66 | 23.12 | 10 | 26.21 | 35.16 | 0.66 | 23.10 | 477 | 0.05 |
| 51 | 25.94 | 35.22 | 0.67 | 23.24 | 20 | 26.20 | 35.16 | 0.66 | 23.10 | 477 | 0.10 |
| 71 | 25.48 | 35.31 | 0.76 | 23.45 | 30 | 26.15 | 35.16 | 0.66 | 23.13 | 475 | 0.14 |
| 79 | 24.96 | 35.30 | 0.80 | 23.60 | 50 | 25.97 | 35.21 | 0.67 | 23.22 | 466 | 0.24 |
| 89 | 24.56 | 35.41 | 0.88 | 23.80 | 75 | 24.20 | 35.30 | 0.78 | 23.83 | 408 | 0.35 |
| 96 | 24.58 | 35.53 | 0.90 | 23.89 | 100 | 24.57 | 35.56 | 0.92 | 23.91 | 400 | 0.45 |
| 106 | 23.32 | 35.51 | 1.04 | 24.25 | 150 | 17.85 | 35.21 | 1.27 | 25.49 | 250 | 0.62 |
| 119 | 22.18 | 35.61 | 1.07 | 24.65 | 200 | 13.35 | 34.91 | 1.70 | 26.27 | 176 | 0.72 |
| 130 | 19.60 | 35.19 | 1.15 | 25.03 | 250 | 12.14 | 34.88 | 1.94 | 26.49 | 155 | 0.81 |
| 158 | 16.52 | 35.12 | 1.39 | 25.74 | | | | | | | |
| 192 | 13.44 | 34.89 | 1.65 | 26.24 | | | | | | | |
| 276 | 11.66 | 34.85 | 2.11 | 26.55 | | | | | | | |

a) Duplicate value, 1.05 µg at/L.
b) Duplicate value, 1.25 µg at/L.
c) Duplicate value, 0.64 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |

HUGH M. SMITH; August 1, 1952; 2012 GCT; 0°39'S, 149°49'W; wind, 130°, 21 kt; weather, partly cloudy; sea, very rough; wire angle, 55°. 19

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 26.22 | 35.22 | 0.53a) | 23.15 | 0 | (26.22) | (35.22) | | (23.15) | (473) | (0.00) |
| 30 | 26.20 | 35.22 | 0.56 | 23.16 | 10 | 26.21 | 35.22 | | 23.16 | 473 | 0.05 |
| 58 | 26.10 | 35.28 | 0.55 | 23.24 | 20 | 26.20 | 35.22 | | 23.16 | 472 | 0.10 |
| 83 | 25.96 | 35.44 | 0.60 | 23.40 | 30 | 26.20 | 35.22 | | 23.16 | 472 | 0.14 |
| 108 | 24.60 | 35.96 | 0.78b) | 24.21 | 50 | 26.17 | 35.26 | | 23.20 | 468 | 0.24 |
| 120 | 22.37 | 35.79 | 0.93 | 24.73 | 75 | 26.00 | 35.36 | | 23.32 | 456 | 0.35 |
| 131 | 18.88 | 35.38 | 1.02 | 25.36 | 100 | 25.85 | 35.63 | | 23.58 | 433 | 0.46 |
| 145 | 17.48 | 35.35 | 1.21 | 25.68 | 150 | 16.93 | 35.30 | | 25.77 | 223 | 0.63 |
| 161 | 15.70 | 35.18 | 1.26 | 25.97 | 200 | 13.59 | 34.93 | | 26.23 | 179 | 0.74 |
| 178c) | 14.24 | 34.97 | 1.35 | 26.13 | 250 | 11.83 | 34.87 | | 26.54 | 150 | 0.82 |
| 234c) | 12.10 | 34.88 | 1.80 | 26.50 | 300 | 11.27 | 34.84 | | 26.62 | 143 | 0.90 |
| 320 | 11.08 | 34.83 | 2.11 | 26.65 | | | | | | | |

HUGH M. SMITH; August 2, 1952; 0033 GCT; 0°59'S, 149°50'W; wind, 090°, 17 kt; weather, partly cloudy; sea, rough; wire angle, 52°. 20

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 26.44 | 35.28 | 0.72 | 23.13 | 0 | (26.44) | (35.28) | (0.72) | (23.13) | (475) | (0.00) |
| 32 | 26.32 | 35.27 | 0.73 | 23.16 | 10 | 26.42 | 35.28 | 0.72 | 23.14 | 475 | 0.05 |
| 61 | 26.28 | 35.14 | 0.70 | 23.07 | 20 | 26.38 | 35.28 | 0.73 | 23.15 | 474 | 0.10 |
| 90 | 26.25 | 35.45 | 0.80 | 23.31 | 30 | 26.33 | 35.27 | 0.73 | 23.15 | 473 | 0.14 |
| 103 | 26.28 | 35.55 | 0.83 | 23.38 | 50 | 26.29 | 35.20 | 0.69 | 23.11 | 477 | 0.24 |
| 116 | 23.36 | 35.87 | 1.09 | 24.51 | 75 | 26.26 | 35.30 | 0.76 | 23.20 | 468 | 0.36 |
| 127 | 21.04 | 35.83 | 1.14 | 25.13 | 100 | 26.27 | 35.52 | 0.82 | 23.36 | 453 | 0.47 |
| 140 | 19.07 | 35.61 | 1.33 | 25.49 | 150 | 17.30 | 35.47 | 1.50 | 25.28 | 270 | 0.66 |
| 156 | 15.92 | 35.33 | 1.58 | 26.04 | 200 | 13.88 | 35.06 | 1.65 | 26.28 | 175 | 0.77 |
| 169 | 14.30 | 35.06 | 1.56 | 26.19 | 250 | 11.75 | 34.89 | 2.23 | 26.57 | 148 | 0.86 |
| 203 | 13.78 | 35.07 | 1.69 | 26.30 | 300 | 11.44 | 34.87 | 2.25 | 26.61 | 144 | 0.93 |
| 239 | 11.82 | 34.90 | 2.22 | 26.56 | | | | | | | |
| 321 | 11.31 | 34.86 | 2.26 | 26.63 | | | | | | | |

HUGH M. SMITH; August 2, 1952; 0527 GCT; 1°28'S, 149°45'W; wind, 090°, 18 kt; weather, missing; sea, rough; wire angle, 29°. 21

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 26.52 | 35.35 | 0.69 | 23.16 | 0 | (26.52) | (35.35) | (0.69) | (23.16) | (472) | (0.00) |
| 44 | 26.49 | 35.38 | 0.70 | 23.19 | 10 | 26.52 | 35.36 | 0.68 | 23.16 | 472 | 0.05 |
| 87 | 26.57 | 35.50 | 0.68 | 23.25 | 20 | 26.52 | 35.36 | 0.68 | 23.16 | 472 | 0.09 |
| 131 | 21.04 | 35.75 | 1.15 | 25.07 | 30 | 26.49 | 35.37 | 0.68 | 23.18 | 470 | 0.14 |
| 152 | 16.14 | 35.35 | 1.58 | 26.00 | 50 | 26.48 | 35.40 | 0.69 | 23.20 | 468 | 0.24 |
| 175 | 14.72 | 35.17 | 1.72 | 26.18 | 75 | 26.53 | 35.45 | 0.69 | 23.22 | 466 | 0.35 |
| 197 | 12.88 | 34.98 | 2.18 | 26.42 | 100 | 26.57 | 35.56 | 0.69 | 23.30 | 459 | 0.47 |
| 220 | 12.35 | 34.92 | 2.32 | 26.48 | 150 | 16.40 | 35.38 | 1.56 | 25.96 | 205 | 0.64 |
| 242 | 12.16 | 34.89 | 2.38 | 26.49 | 200 | 12.81 | 34.97 | 2.19 | 26.42 | 161 | 0.73 |
| 264 | 11.96 | 34.90 | 2.47d) | 26.54 | 250 | 12.07 | 34.90 | 2.40 | 26.52 | 152 | 0.82 |
| 310 | 11.46 | 34.84 | 2.60 | 26.58 | 300 | 11.59 | 34.85 | 2.55 | 26.57 | 148 | 0.89 |
| 355 | 10.78 | 34.85 | 2.68 | 26.72 | 400 | 9.64 | 34.80 | 2.71 | 26.87 | 119 | 1.04 |
| 448 | 8.28 | 34.72 | 2.77e) | 27.03 | | | | | | | |

a) The analyses of the phosphate data collected on this station appear to be faulty; all values are somewhat low.
b) Duplicate value, 0.84 µg at/L.
c) Nansen bottle between 178 and 234 meters pretripped; data rejected.
d) Duplicate value, 2.38 µg at/L.
e) Duplicate value, 2.73 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **22** | HUGH M. SMITH; August 2, 1952; 1058 GCT; 1°58'S, 149°48'W; wind, 090°, 16 kt; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 5 | 26.90 | 35.63 | 0.73 | 23.25 | 0 | (26.90) | (35.63) | (0.73) | (23.25) | (464) | (0.00) |
| 49 | 26.91 | 35.64 | 0.72 | 23.25 | 10 | 26.90 | 35.63 | 0.73 | 23.25 | 464 | 0.05 |
| 97 | 26.88 | 35.61 | 0.70 | 23.24 | 20 | 26.90 | 35.63 | 0.73 | 23.25 | 464 | 0.09 |
| 122 | 23.32 | 35.68 | 1.10 | 24.38 | 30 | 26.90 | 35.63 | 0.73 | 23.25 | 464 | 0.14 |
| 146 | 17.14 | 35.37 | 1.56 | 25.78 | 50 | 26.91 | 35.62 | 0.72 | 23.24 | 465 | 0.23 |
| 170 | 14.77 | 35.15 | 1.93 | 26.16 | 75 | 26.91 | 35.61 | 0.71 | 23.23 | 466 | 0.35 |
| 195 | 12.76 | 34.95 | 2.31 | 26.42 | 100 | 26.88 | 35.61 | 0.69 | 23.24 | 465 | 0.43 |
| 219 | 12.40 | 34.94 | 2.27 | 26.48 | 150 | 16.94 | 35.35 | 1.59 | 25.81 | 220 | 0.53 |
| 244 | 12.14 | 34.91 | 2.25 | 26.51 | 200 | 12.65 | 34.95 | 2.30 | 26.45 | 160 | 0.63 |
| 268 | 11.83 | 34.94 | 2.24 | 26.59 | 250 | 12.05 | 34.92 | 2.24 | 26.54 | 151 | 0.71 |
| 293 | 11.66 | 34.87 | 2.35 | 26.57 | 300 | 11.56 | 34.86 | 2.41 | 26.58 | 146 | 0.78 |
| 343 | 10.68 | 34.80 | 2.69 | 26.70 | | | | | | | |
| 394 | 9.60 | 34.71 | 2.86 | 26.81 | | | | | | | |
| **23** | HUGH M. SMITH; August 2, 1952; 1633 GCT; 2°29'S, 149°53'W; wind, 090°, 18 kt; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 5 | 27.10 | 35.56 | 0.55a) | 23.13 | 0 | (27.10) | (35.56) | | (23.13) | (475) | (0.00) |
| 49 | 27.10 | 35.58 | 0.55 | 23.15 | 10 | 27.11 | 35.57 | | 23.13 | 475 | 0.05 |
| 77 | 27.00 | 35.59 | 0.53 | 23.18 | 20 | 27.09 | 35.57 | | 23.14 | 474 | 0.10 |
| 97 | 26.67 | 35.60 | 0.62 | 23.30 | 30 | 27.09 | 35.57 | | 23.14 | 474 | 0.14 |
| 117 | 23.44 | 35.70 | 0.92 | 24.36 | 50 | 27.09 | 35.59 | | 23.16 | 472 | 0.24 |
| 135 | 19.92 | 35.61 | 1.12 | 25.27 | 75 | 27.01 | 35.59 | | 23.18 | 470 | 0.36 |
| 155 | 14.36 | 35.12 | 1.88 | 26.22 | 100 | 26.60 | 35.60 | | 23.32 | 457 | 0.47 |
| 172 | 12.72 | 34.94 | 2.24 | 26.42 | 150 | 14.40 | 35.12 | | 26.21 | 182 | 0.64 |
| 192 | 12.56 | 34.95 | 2.18 | 26.46 | 200 | 12.47 | 34.94 | | 26.47 | 157 | 0.72 |
| 216 | 12.28 | 34.93 | 2.08 | 26.50 | 250 | 11.91 | 34.90 | | 26.55 | 150 | 0.80 |
| 264 | 11.75 | 34.88 | 2.27 | 26.56 | 300 | 11.52 | 34.87 | | 26.60 | 145 | 0.88 |
| 312 | 11.42 | 34.86 | 2.14 | 26.61 | | | | | | | |
| 386 | 10.36 | 34.80 | 2.48 | 26.75 | | | | | | | |
| **24** | HUGH M. SMITH; August 2, 1952; 2203 GCT; 2°59'S, 149°59'W; wind, 120°, 15 kt; weather, partly cloudy; sea, moderate; wire angle, 20°. | | | | | | | | | | |
| 5 | 27.37 | 35.52 | 0.74b) | 23.01 | 0 | (27.37) | (35.52) | (0.74) | (23.01) | (486) | (0.00) |
| 45 | 27.24 | 35.54 | 0.73 | 23.07 | 10 | 27.33 | 35.53 | 0.74 | 23.03 | 485 | 0.05 |
| 72 | 27.22 | 35.53 | 0.66c) | 23.07 | 20 | 27.27 | 35.54 | 0.74 | 23.07 | 482 | 0.10 |
| 89 | 27.12 | 35.52 | 0.73 | 23.09 | 30 | 27.26 | 35.54 | 0.74 | 23.06 | 482 | 0.14 |
| 103 | 25.76 | 35.66 | 0.93 | 23.62 | 50 | 27.25 | 35.53 | 0.73 | 23.06 | 482 | 0.24 |
| 116 | 22.10 | 35.61 | 1.20d) | 24.67 | 75 | 27.20 | 35.52 | 0.75 | 23.07 | 481 | 0.36 |
| 129 | 20.82 | 35.61 | 1.29 | 25.02 | 100 | 25.85 | 35.65 | 0.92 | 23.59 | 431 | 0.48 |
| 143 | 17.82 | 35.44 | 1.54 | 25.67 | 150 | 17.12 | 35.37 | 1.62 | 25.79 | 222 | 0.64 |
| 161 | 14.18 | 35.09 | 2.15e) | 26.23 | 200 | 12.38 | 34.92 | 2.37 | 26.47 | 157 | 0.74 |
| 179 | 12.86 | 34.96 | 2.37 | 26.41 | 250 | 11.72 | 34.87 | 2.28 | 26.56 | 148 | 0.82 |
| 225 | 11.93 | 34.88 | 2.35 | 26.53 | 300 | 11.22 | 34.84 | 2.20 | 26.63 | 142 | 0.90 |
| 271 | 11.52 | 34.86 | 2.19 | 26.59 | | | | | | | |
| 364 | 10.32 | 34.78 | 2.33 | 26.74 | | | | | | | |

a) The analyses of phosphate data collected on this station appear to be faulty; all values are somewhat low.
b) Duplicate value, 0.69 µg at/L.
c) Duplicate value, 0.75 µg at/L.
d) Duplicate value, 1.13 µg at/L.
e) Duplicate value, 2.01 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |

HUGH M. SMITH; August 3, 1952; 0319 GCT; 3°29'S, 149°57'W; wind, 120°, 20 kt; weather, partly cloudy; sea, moderate; wire angle, 28°. 25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 27.41 | 35.40 | 0.67 | 22.91 | 0 | (27.41) | (35.40) | (0.67) | (22.91) | (496) | (0.00) |
| 44 | 27.28 | 35.43 | 0.66 | 22.97 | 10 | 27.40 | 35.41 | 0.67 | 22.92 | 495 | 0.05 |
| 68 | 27.26 | 35.44 | 0.62 | 22.99 | 20 | 27.37 | 35.41 | 0.66 | 22.93 | 494 | 0.10 |
| 84 | 27.26 | 35.43 | 0.65 | 22.98 | 30 | 27.31 | 35.42 | 0.66 | 22.96 | 492 | 0.15 |
| 96 | 27.28 | 35.41 | 0.65 | 22.96 | 50 | 27.27 | 35.44 | 0.64 | 22.98 | 484 | 0.25 |
| 108 | 26.42 | 35.68 | 0.80 | 23.43 | 75 | 27.26 | 35.42 | 0.64 | 22.97 | 490 | 0.37 |
| 120 | 23.65 | 35.82 | 0.95 | 24.38 | 100 | 27.27 | 35.44 | 0.66 | 22.99 | 489 | 0.49 |
| 131 | 19.59 | 35.52 | 1.34 | 25.28 | 150 | 14.46 | 35.10 | 1.99 | 26.18 | 184 | 0.66 |
| 143 | 15.62 | 35.21 | 1.76 | 26.01 | 200 | 12.28 | 34.91 | 2.34 | 26.48 | 156 | 0.75 |
| 161 | 13.15 | 34.99 | 2.27 | 26.37 | 250 | 11.55 | 34.86 | 2.30 | 26.58 | 146 | 0.83 |
| 199 | 12.32 | 34.92 | 2.34 | 26.48 | 300 | 10.95 | 34.82 | 2.29 | 26.66 | 139 | 0.90 |
| 238 | 11.72 | 34.87 | 2.31 | 26.56 | | | | | | | |
| 325 | 10.61 | 34.81 | 2.28 | 26.71 | | | | | | | |

HUGH M. SMITH; August 3, 1952; 0835 GCT; 3°59'S, 150°05'W; wind, 110°, 15 kt; weather, cloudy; sea, moderate; wire angle, 30°. 26

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 27.24 | 35.47 | 0.67 | 23.02 | 0 | (27.24) | (35.47) | (0.67) | (23.02) | (486) | (0.00) |
| 43 | 27.24 | 35.45 | 0.65 | 23.00 | 10 | 27.24 | 35.46 | 0.66 | 23.01 | 487 | 0.05 |
| 67 | 27.18 | 35.48 | 0.61 | 23.04 | 20 | 27.24 | 35.45 | 0.66 | 23.00 | 488 | 0.10 |
| 83 | 27.20 | 35.45 | 0.64 | 23.01 | 30 | 27.24 | 35.45 | 0.66 | 23.00 | 488 | 0.15 |
| 95 | 27.21 | 35.45 | 0.63 | 23.01 | 50 | 27.22 | 35.47 | 0.63 | 23.02 | 486 | 0.24 |
| 106 | 27.18 | 35.46 | 0.65 | 23.03 | 75 | 27.19 | 35.46 | 0.63 | 23.02 | 485 | 0.37 |
| 117 | 26.59 | 35.64 | 0.78 | 23.35 | 100 | 27.21 | 35.45 | 0.64 | 23.01 | 486 | 0.49 |
| 129 | 24.09 | 35.85 | 0.93 | 24.28 | 150 | 17.92 | 35.41 | 1.48 | 25.62 | 237 | 0.67 |
| 140 | 19.52 | 35.56 | 1.29 | 25.33 | 200 | 12.47 | 34.90 | 2.26 | 26.44 | 160 | 0.78 |
| 157 | 16.32 | 35.26 | 1.72 | 25.89 | 250 | 11.39 | 34.85 | 2.19 | 26.60 | 144 | 0.85 |
| 192 | 12.56 | 34.91 | 2.26 | 26.43 | 300 | 10.65 | 34.80 | 2.15 | 26.70 | 135 | 0.93 |
| 231 | 11.77 | 34.87 | 2.21 | 26.55 | | | | | | | |
| 311 | 10.43 | 34.78 | 2.14 | 26.72 | | | | | | | |

HUGH M. SMITH; August 3, 1952; 1357 GCT; 4°29'S, 150°12'W; wind, 120°, 16 kt; weather, missing; sea, moderate; wire angle, 29°. 27

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 27.21 | 35.29 | 0.66 | 22.89 | 0 | (27.21) | (35.29) | (0.66) | (22.89) | (498) | (0.00) |
| 63 | 27.19 | 35.41 | 0.65 | 22.99 | 10 | 27.21 | 35.31 | 0.65 | 22.91 | 496 | 0.05 |
| 82 | 27.15 | 35.43 | 0.64 | 23.01 | 20 | 27.20 | 35.34 | 0.64 | 22.93 | 494 | 0.10 |
| 94 | 27.14 | 35.46 | 0.65 | 23.04 | 30 | 27.20 | 35.36 | 0.64 | 22.95 | 492 | 0.15 |
| 105 | 27.16 | 35.47 | 0.66 | 23.04 | 50 | 27.20 | 35.39 | 0.64 | 22.97 | 490 | 0.25 |
| 117 | 26.94 | 35.53 | 0.70 | 23.16 | 75 | 27.18 | 35.42 | 0.65 | 22.99 | 488 | 0.37 |
| 128 | 25.36 | 35.73 | 0.81a) | 23.80 | 100 | 27.16 | 35.46 | 0.66 | 23.04 | 484 | 0.49 |
| 139 | 20.48 | 35.68 | 1.12 | 25.17 | 150 | 17.63 | 35.35 | 1.48 | 25.65 | 235 | 0.68 |
| 150 | 17.63 | 35.35 | 1.48 | 25.65 | 200 | 13.35 | 35.03 | 1.89 | 26.36 | 167 | 0.78 |
| 164 | 15.50 | 35.22 | 1.71 | 26.05 | 250 | 11.92 | 34.91 | 1.95 | 26.55 | 149 | 0.86 |
| 193 | 13.54 | 35.05 | 1.89 | 26.34 | 300 | 10.80 | 34.81 | 2.14 | 26.68 | 137 | 0.94 |
| 231 | 12.32 | 34.94 | 1.91 | 26.50 | | | | | | | |
| 312 | 10.50 | 34.79 | 2.19 | 26.72 | | | | | | | |

a) Duplicate value, 0.86 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $PO_4$-P | $\sigma_t$ | Z | T | S | $PO_4$-P | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | µg at/L | g/L | m | °C | ‰ | µg at/L | g/L | cl/ton | dyn m |
| **28** | HUGH M. SMITH; August 3, 1952; 1920 GCT; 5°02'S, 150°12'W; wind, 120°, 17 kt; weather, rain showers; sea, moderate; wire angle, 28°. | | | | | | | | | | |
| 4 | 27.29 | 35.43 | 0.58a) | 22.97 | 0 | (27.29) | (35.43) | (0.58) | (22.97) | (490) | (0.00) |
| 63 | 27.28 | 35.41 | 0.58 | 22.96 | 10 | 27.29 | 35.43 | 0.58 | 22.97 | 490 | 0.05 |
| 83 | 27.27 | 35.43 | 0.52b) | 22.97 | 20 | 27.29 | 35.42 | 0.58 | 22.96 | 491 | 0.10 |
| 96 | 27.26 | 35.46 | 0.60 | 23.00 | 30 | 27.28 | 35.42 | 0.58 | 22.93 | 494 | 0.15 |
| 108 | 27.26 | 35.49 | 0.56 | 23.03 | 50 | 27.28 | 35.41 | 0.58 | 22.96 | 492 | 0.25 |
| 120 | 27.18 | 35.44 | 0.63 | 23.01 | 75 | 27.27 | 35.42 | 0.55 | 22.97 | 490 | 0.37 |
| 132 | 25.96 | 35.62 | 0.73 | 23.53 | 100 | 27.26 | 35.47 | 0.58 | 23.01 | 486 | 0.49 |
| 144 | 23.40 | 35.73 | 0.96 | 24.39 | 150 | 21.70 | 35.69 | 1.05 | 24.84 | 312 | 0.70 |
| 156 | 19.94 | 35.58 | 1.13 | 25.24 | 200 | 13.01 | 35.00 | 1.91 | 26.41 | 163 | 0.82 |
| 173 | 16.62 | 35.37 | 1.52 | 25.91 | 250 | 11.32 | 34.86 | 2.06 | 26.62 | 142 | 0.90 |
| 206 | 12.84 | 34.98 | 1.92 | 26.43 | 300 | 10.59 | 34.81 | 2.17 | 26.72 | 133 | 0.97 |
| 249 | 11.36 | 34.86 | 2.05 | 26.62 | | | | | | | |
| 335 | 10.09 | 34.78 | 2.24 | 26.79 | | | | | | | |
| **29** | HUGH M. SMITH; August 4, 1952; 0326 GCT; 6°00'S, 150°10'W; wind, 120°, 18 kt; weather, partly cloudy; sea, moderate; wire angle, 22°. | | | | | | | | | | |
| 4 | 27.41 | 35.51 | 0.66 | 22.99 | 0 | (27.41) | (35.51) | (0.66) | (22.99) | (488) | (0.00) |
| 55 | 27.30 | 35.51 | 0.65 | 23.03 | 10 | 27.42 | 35.51 | 0.66 | 22.99 | 488 | 0.05 |
| 92 | 27.28 | 35.53 | 0.61 | 23.05 | 20 | 27.40 | 35.52 | 0.66 | 23.00 | 487 | 0.10 |
| 128 | 27.10 | 35.60 | 0.70 | 23.16 | 30 | 27.37 | 35.51 | 0.65 | 23.00 | 487 | 0.15 |
| 146 | 23.67 | 35.81 | 0.99 | 24.37 | 50 | 27.31 | 35.51 | 0.65 | 23.03 | 485 | 0.24 |
| 164 | 21.36 | 35.81 | 1.02 | 25.03 | 75 | 27.29 | 35.52 | 0.63 | 23.04 | 484 | 0.37 |
| 182 | 18.26 | 35.48 | 1.23 | 25.59 | 100 | 27.27 | 35.54 | 0.63 | 23.06 | 482 | 0.49 |
| 200 | 15.78 | 35.19 | 1.48 | 25.96 | 150 | 22.98 | 35.82 | 1.00 | 24.58 | 336 | 0.70 |
| 218 | 13.26 | 34.97 | 1.94 | 26.33 | 200 | 15.78 | 35.19 | 1.48 | 25.96 | 205 | 0.84 |
| 236 | 12.22 | 34.90 | 2.06 | 26.49 | 250 | 11.88 | 34.89 | 2.09 | 26.54 | 150 | 0.93 |
| 272 | 11.19 | 34.87 | 2.14 | 26.66 | 300 | 10.06 | 34.78 | 2.54 | 26.79 | 127 | 1.00 |
| 308 | 9.83 | 34.76 | 2.25 | 26.81 | | | | | | | |
| 364 | 9.22 | 34.72 | 2.24 | 26.88 | | | | | | | |
| **30** | HUGH M. SMITH; August 4, 1952; 1133 GCT; 6°58'S, 150°05'W; wind, 100°, 17 kt; weather, clear; sea, moderate; wire angle, 32°. | | | | | | | | | | |
| 5 | 27.67 | 35.31 | 0.60 | 22.75 | 0 | (27.67) | (35.31) | (0.60) | (22.75) | (511) | (0.00) |
| 63 | 27.50 | 35.44 | 0.60 | 22.91 | 10 | 27.66 | 35.32 | 0.60 | 22.77 | 510 | 0.05 |
| 94 | 27.39 | 35.51 | 0.58 | 23.00 | 20 | 27.65 | 35.33 | 0.60 | 22.78 | 509 | 0.10 |
| 115 | 27.31 | 35.51 | 0.64 | 23.03 | 30 | 27.63 | 35.35 | 0.60 | 22.79 | 507 | 0.15 |
| 128 | 27.19 | 35.61 | 0.66 | 23.14 | 50 | 27.54 | 35.40 | 0.60 | 22.87 | 500 | 0.25 |
| 141 | 26.68 | 35.92 | 0.79 | 23.53 | 75 | 27.44 | 35.48 | 0.59 | 22.96 | 491 | 0.38 |
| 153 | 25.08 | 36.05 | 0.86c) | 24.13 | 100 | 27.37 | 35.51 | 0.59 | 23.01 | 487 | 0.50 |
| 171 | 21.88 | 35.89 | 0.98 | 24.94 | 150 | 25.40 | 36.04 | 0.89 | 24.02 | 390 | 0.72 |
| 192 | 18.52 | 35.51 | 1.15 | 25.55 | 200 | 18.00 | 35.45 | 1.20 | 25.63 | 236 | 0.88 |
| 214 | 15.10 | 35.13 | 1.54 | 26.07 | 250 | 12.60 | 34.88 | 2.02 | 26.40 | 164 | 0.99 |
| 258 | 12.20 | 34.85 | 2.07 | 26.45 | 300 | 10.60 | 34.77 | 2.22 | 26.69 | 136 | 1.07 |
| 303 | 10.49 | 34.76 | 2.23 | 26.70 | | | | | | | |
| 350 | 9.32 | 34.69 | 2.28 | 26.84 | | | | | | | |

a) Duplicate value, 0.74 µg at/L.
b) Duplicate value, 0.47 µg at/L.
c) Duplicate value, 0.96 µg at/L.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; September 6, 1952; 1237 GCT; 20°20'N, 159°14'W; sounding, 2400 fm; wind, 130°, 14 kt; weather, distant precipitation; sea, slight; wire angle, 10°. 1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 26.71 | 34.97 | 22.81 | 0 | (26.71) | (34.97) | (22.80) | (506) | (0.00) |
| 28 | 25.96 | 35.13 | 23.16 | 10 | 26.71 | 34.97 | 22.80 | 506 | 0.05 |
| 52 | 24.52 | 34.92 | 23.45 | 20 | 26.60 | 35.03 | 22.88 | 498 | 0.10 |
| 100 | 22.81 | 35.16 | 24.13 | 30 | 25.93 | 35.13 | 23.17 | 471 | 0.15 |
| 148 | 20.52 | 35.16 | 24.76 | 50 | 24.61 | 35.12 | 23.57 | 433 | 0.24 |
| 196 | 17.61 | 34.83 | 25.25 | 75 | 23.78 | 35.13 | 23.82 | 409 | 0.35 |
| 243 | 14.31 | 34.45 | 25.72 | 100 | 22.81 | 35.16 | 24.12 | 380 | 0.44 |
| 291 | 11.36 | 34.24 | 26.14 | 150 | 20.41 | 35.16 | 24.79 | 357 | 0.62 |
| 338 | 9.38 | 34.17 | 26.43 | 200 | 17.42 | 34.81 | 25.28 | 269 | 0.77 |
| 387 | 8.02 | 34.15 | 26.62 | 250 | 13.88 | 34.41 | 25.77 | 223 | 0.90 |
| 482 | 6.62 | 34.22 | 26.88 | 300 | 10.92 | 34.22 | 26.20 | 182 | 1.00 |
| 578 | 5.63 | 34.29 | 27.06 | 400 | 7.80 | 34.15 | 26.65 | 139 | 1.17 |
| 675 | 5.08 | 34.36 | 27.18 | 500 | 6.42 | 34.23 | 26.91 | 115 | 1.30 |
| | | | | 600 | 5.45 | 34.31 | 27.09 | 98 | 1.42 |

HUGH M. SMITH; September 6, 1952; 1937 GCT; 21°11'N, 159°17'W; sounding, 2200 fm; wind, 070°, 11 kt; weather, cloudy; sea, moderate; wire angle, 08°. 2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 26.04 | 35.13 | 23.14 | 0 | (26.04) | (35.13) | (23.14) | (474) | (0.00) |
| 28 | 26.02 | 35.13 | 23.14 | 10 | 26.03 | 35.13 | 23.14 | 474 | 0.05 |
| 52 | 24.16 | 35.10 | 23.69 | 20 | 26.02 | 35.13 | 23.14 | 474 | 0.10 |
| 99 | 22.02 | 35.13 | 24.33 | 30 | 26.00 | 35.13 | 23.15 | 473 | 0.14 |
| 147 | 20.17 | 35.11 | 24.82 | 50 | 24.28 | 35.10 | 23.65 | 425 | 0.23 |
| 195 | 17.43 | 34.80 | 25.28 | 75 | 23.25 | 35.10 | 23.95 | 396 | 0.34 |
| 243 | 14.06 | 34.41 | 25.74 | 100 | 22.00 | 35.13 | 24.33 | 360 | 0.43 |
| 290 | 11.30 | 34.21 | 26.12 | 150 | 20.01 | 35.10 | 24.85 | 211 | 0.60 |
| 338 | 9.92 | 34.16 | 26.33 | 200 | 17.41 | 34.80 | 25.28 | 270 | 0.75 |
| 386 | 8.65 | 34.14 | 26.52 | 250 | 13.50 | 34.36 | 25.81 | 219 | 0.87 |
| 482 | 7.03 | 34.17 | 26.78 | 300 | 10.98 | 34.20 | 26.17 | 185 | 0.98 |
| 578 | 6.10 | 34.28 | 26.99 | 400 | 8.39 | 34.14 | 26.56 | 148 | 1.15 |
| 676 | 5.56 | 34.35 | 27.11 | 500 | 6.83 | 34.19 | 26.82 | 123 | 1.30 |
| | | | | 600 | 5.92 | 34.30 | 27.03 | 104 | 1.42 |

HUGH M. SMITH; September 7, 1952; 0107 GCT; 21°43'N, 159°16'W; sounding, 1800 fm; wind, 060°, 22 kt; weather, partly cloudy; sea, moderate; wire angle, 35°. 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.13 | 35.06 | 23.06 | 0 | 26.13 | 35.06 | 23.05 | 482 | 0.00 |
| 19 | 26.10 | 35.08 | 23.08 | 10 | 26.13 | 35.06 | 23.05 | 482 | 0.05 |
| 37 | 25.97 | 35.07 | 23.11 | 20 | 26.09 | 35.08 | 23.08 | 479 | 0.10 |
| 72 | 24.07 | 35.18 | 23.78 | 30 | 26.02 | 35.07 | 23.10 | 478 | 0.14 |
| 107 | 22.44 | 35.15 | 24.23 | 50 | 25.76 | 35.08 | 23.18 | 469 | 0.24 |
| 142 | 21.56 | 35.16 | 24.48 | 75 | 23.80 | 35.18 | 23.85 | 406 | 0.35 |
| 179 | 18.78 | 34.97 | 25.07 | 100 | 22.57 | 35.15 | 24.19 | 374 | 0.45 |
| 214 | 16.68 | 34.70 | 25.38 | 150 | 21.28 | 35.16 | 24.55 | 339 | 0.63 |
| 250 | 14.29 | 34.46 | 25.73 | 200 | 17.50 | 34.81 | 25.26 | 271 | 0.78 |
| 285 | 11.70 | 34.23 | 26.07 | 250 | 14.29 | 34.46 | 25.72 | 228 | 0.91 |
| 357 | 8.90 | 34.16 | 26.50 | 300 | 10.81 | 34.19 | 26.19 | 183 | 1.02 |
| 429 | 7.86 | 34.15 | 26.65 | 400 | 8.23 | 34.15 | 26.59 | 145 | 1.19 |
| 502 | 6.82 | 34.21 | 26.84 | 500 | 6.84 | 34.21 | 26.83 | 122 | 1.33 |
| | | | | 600 | (5.93) | (34.29) | (27.02) | (105) | (1.45) |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 4 | HUGH M. SMITH; September 7, 1952; 0744 GCT; 22°28'N, 159°15'W; sounding, 1800 fm; wind, 080°, 19 kt; weather, partly cloudy; sea, moderate; wire angle, 25°. | | | | | | | | |
| 0 | 25.90 | 35.07 | 23.14 | 0 | 25.90 | 35.07 | 23.13 | 474 | 0.00 |
| 22 | 25.88 | 35.07 | 23.14 | 10 | 25.89 | 35.07 | 23.14 | 474 | 0.05 |
| 44 | 25.28 | 35.15 | 23.39 | 20 | 25.88 | 35.07 | 23.14 | 474 | 0.10 |
| 87 | 24.28 | 35.14 | 23.69 | 30 | 25.87 | 35.08 | 23.15 | 472 | 0.14 |
| 131 | 22.09 | 35.18 | 24.35 | 50 | 25.14 | 35.15 | 23.43 | 446 | 0.23 |
| 174 | 20.81 | 35.16 | 24.68 | 75 | 24.92 | 35.15 | 23.49 | 440 | 0.35 |
| 218 | 19.22 | 35.06 | 25.03 | 100 | 23.34 | 35.16 | 23.97 | 394 | 0.45 |
| 262 | 16.61 | 34.70 | 25.39 | 150 | 21.75 | 35.18 | 24.44 | 350 | 0.64 |
| 306 | 12.88 | 34.27 | 25.87 | 200 | 19.94 | 35.11 | 24.88 | 308 | 0.81 |
| 350 | 10.58 | 34.14 | 26.20 | 250 | 17.19 | 34.78 | 25.31 | 266 | 0.95 |
| 438 | 8.51 | 34.29 | 26.66 | 300 | 13.47 | 34.32 | 25.79 | 221 | 1.08 |
| 525 | 6.30 | 34.02 | 26.76 | 400 | 9.37 | 34.22 | 26.46 | 157 | 1.28 |
| 613 | 5.21 | 34.09 | 26.95 | 500 | 6.87 | 34.07 | 26.72 | 132 | 1.43 |
| | | | | 600 | 5.33 | 34.08 | 26.92 | 113 | 1.56 |
| 5 | HUGH M. SMITH; September 7, 1952; 1452 GCT; 23°14'N, 159°18'W; sounding, missing; wind, 090°, 22 kt; weather, overcast; sea, moderate; wire angle, 12°. | | | | | | | | |
| 0 | 25.15 | 35.17 | | 0 | 25.15 | 35.17 | 23.44 | 445 | 0.00 |
| 24 | 25.16 | 35.21 | | 10 | 25.15 | 35.19 | 23.46 | 444 | 0.04 |
| 48 | 25.12 | 35.21 | | 20 | 25.16 | 35.21 | 23.47 | 442 | 0.09 |
| 95 | 23.23 | 35.13 | | 30 | 25.16 | 35.21 | 23.47 | 442 | 0.13 |
| 143 | 22.20 | 35.20 | | 50 | 25.12 | 35.21 | 23.48 | 441 | 0.22 |
| 190 | 21.32 | 35.25 | | 75 | 25.12 | 35.21 | 23.48 | 441 | 0.33 |
| 238 | 19.63 | 35.11 | | 100 | 23.06 | 35.14 | 24.04 | 388 | 0.44 |
| 286 | 16.56 | 34.72 | | 150 | 22.09 | 35.22 | 24.37 | 356 | 0.62 |
| 334 | 12.68 | 34.10 | | 200 | 21.12 | 35.25 | 24.67 | 328 | 0.80 |
| 381 | 10.64 | 34.14 | | 250 | 19.09 | 35.05 | 25.05 | 292 | 0.96 |
| 477 | 8.04 | 34.11 | | 300 | 15.22 | 34.51 | 25.56 | 243 | 1.10 |
| 573 | 6.06 | 34.05 | | 400 | 10.07 | 34.14 | 26.28 | 174 | 1.31 |
| 671 | 4.96 | 34.14 | | 500 | 7.52 | 34.09 | 26.65 | 140 | 1.48 |
| | | | | 600 | 5.67 | 34.07 | 26.88 | 118 | 1.62 |
| 6 | HUGH M. SMITH; September 7, 1952; 2153 GCT; 23°09'N, 158°26'W; sounding, missing; wind, 080°, 19 kt; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | |
| 0 | 25.38 | 35.18 | 23.38 | 0 | 25.38 | 35.18 | 23.38 | 451 | 0.00 |
| 24 | 25.30 | 35.19 | 23.41 | 10 | 25.32 | 35.18 | 23.40 | 449 | 0.04 |
| 48 | 25.28 | 35.21 | 23.44 | 20 | 25.30 | 35.19 | 23.41 | 448 | 0.09 |
| 95 | 22.79 | 35.30 | 24.24 | 30 | 25.30 | 35.19 | 23.41 | 448 | 0.14 |
| 143 | 21.35 | 35.22 | 24.58 | 50 | 25.28 | 35.21 | 23.43 | 446 | 0.22 |
| 191 | 19.90 | 35.14 | 24.91 | 75 | 23.02 | 35.30 | 24.17 | 375 | 0.33 |
| 239 | 17.10 | 34.77 | 25.33 | 100 | 22.71 | 35.30 | 24.26 | 367 | 0.42 |
| 287 | 14.24 | 34.43 | 25.71 | 150 | 21.25 | 35.22 | 24.61 | 334 | 0.60 |
| 335 | 11.82 | 34.23 | 26.04 | 200 | 19.46 | 35.10 | 24.99 | 297 | 0.76 |
| 383 | 10.41 | 34.10 | 26.20 | 250 | 16.41 | 34.68 | 25.42 | 256 | 0.90 |
| 479 | 8.24 | 34.04 | 26.50 | 300 | 13.60 | 34.37 | 25.80 | 221 | 1.02 |
| 575 | 5.95 | 34.02 | 26.81 | 400 | 10.03 | 34.08 | 26.24 | 178 | 1.23 |
| 671 | 4.98 | 34.06 | 26.96 | 500 | 7.67 | 34.03 | 26.58 | 146 | 1.40 |
| | | | | 600 | 5.66 | 34.03 | 26.85 | 121 | 1.54 |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; September 8, 1952; 0348 GCT; 22°30'N, 158°20'W; sounding, 2600 fm; wind, 090°, 18 kt; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | 7 |
| 1 | 25.40 | 35.19 | 23.38 | 0 | (25.40) | (35.19) | (23.38) | (451) | (0.00) |
| 23 | 25.36 | 35.19 | 23.39 | 10 | 25.38 | 35.19 | 23.38 | 451 | 0.04 |
| 46 | 24.40 | 35.14 | 23.65 | 20 | 25.36 | 35.19 | 23.39 | 450 | 0.09 |
| 91 | 22.44 | 35.16 | 24.24 | 30 | 25.33 | 35.19 | 23.40 | 449 | 0.14 |
| 137 | 21.16 | 35.23 | 24.64 | 50 | 24.01 | 35.14 | 23.76 | 415 | 0.22 |
| 183 | 19.34 | 35.08 | 25.01 | 75 | 23.02 | 35.15 | 24.06 | 386 | 0.32 |
| 228 | 16.78 | 34.74 | 25.38 | 100 | 22.25 | 35.17 | 24.29 | 364 | 0.42 |
| 274 | 13.55 | 34.36 | 25.80 | 150 | 20.60 | 35.20 | 24.77 | 318 | 0.59 |
| 320 | 12.04 | 34.26 | 26.03 | 200 | 18.92 | 35.03 | 25.08 | 289 | 0.74 |
| 365 | 10.32 | 34.14 | 26.24 | 250 | 14.88 | 34.51 | 25.63 | 236 | 0.88 |
| 457 | 8.03 | 34.12 | 26.60 | 300 | 12.72 | 34.31 | 25.93 | 208 | 0.99 |
| 550 | 6.60 | 34.18 | 26.85 | 400 | 9.34 | 34.12 | 26.39 | 164 | 1.19 |
| 646 | 6.02 | 34.29 | 27.01 | 500 | 7.25 | 34.15 | 26.73 | 130 | 1.34 |
| | | | | 600 | 6.28 | 34.22 | 26.92 | 114 | 1.47 |
| HUGH M. SMITH; September 8, 1952; 1016, 1042 GCT; 21°42'N, 158°20'W; sounding, 500 fm; wind, 080°, 21 kt; weather, moderate rain; sea, moderate; wire angle, 15°, 15°. | | | | | | | | | 8 |
| 0 | 25.82 | 35.11 | 23.19 | 0 | 25.82 | 35.11 | 23.19 | 469 | 0.00 |
| 23 | 25.82 | 35.11 | 23.19 | 10 | 25.82 | 35.11 | 23.19 | 469 | 0.05 |
| 45 | 25.44 | 35.18 | 23.36 | 20 | 25.82 | 35.11 | 23.19 | 469 | 0.09 |
| 92 | 23.80 | 35.20 | 23.87 | 30 | 25.60 | 35.16 | 23.29 | 459 | 0.14 |
| 137 | 21.78 | 35.32 | 24.54 | 50 | 25.43 | 35.18 | 23.36 | 452 | 0.23 |
| 183 | 19.50 | 35.16 | 25.03 | 75 | 24.33 | 35.20 | 23.71 | 419 | 0.34 |
| 229 | 15.86 | 34.64 | 25.52 | 100 | 23.70 | 35.20 | 23.90 | 401 | 0.44 |
| 275 | 13.90 | 34.41 | 25.77 | 150 | 20.68 | 35.27 | 24.80 | 315 | 0.63 |
| 321 | 11.44 | 34.24 | 26.12 | 200 | 19.30 | 35.14 | 25.06 | 290 | 0.78 |
| 367 | 10.41 | 34.23 | 26.30 | 250 | 14.80 | 34.51 | 25.65 | 234 | 0.92 |
| | | | | 300 | 12.60 | 34.30 | 25.94 | 206 | 1.03 |
| 460 | 8.07 | 34.18 | 26.54 | 400 | 9.40 | 34.21 | 26.45 | 158 | 1.22 |
| 554 | 6.76 | 34.23 | 26.87 | 500 | 7.45 | 34.20 | 26.74 | 131 | 1.37 |
| 648 | 5.85 | 34.32 | 27.06 | 600 | 6.28 | 34.27 | 26.96 | 110 | 1.50 |
| HUGH M. SMITH; September 8, 1952; 2105 GCT; 20°58'N, 158°14'W; sounding, 1900 fm; wind, 080°, 19 kt; weather, partly cloudy; sea, moderate; wire angle, 35°. | | | | | | | | | 9 |
| 0 | 25.47 | 35.10 | 23.29 | 0 | 25.47 | 35.10 | 23.29 | 459 | 0.00 |
| 16 | 25.46 | 35.08 | 23.28 | 10 | 25.47 | 35.09 | 23.28 | 460 | 0.05 |
| 34 | 25.39 | 35.11 | 23.33 | 20 | 25.46 | 35.09 | 23.28 | 460 | 0.09 |
| 66 | 24.04 | 35.08 | 23.71 | 30 | 25.42 | 35.10 | 23.30 | 458 | 0.14 |
| 99 | 22.64 | 35.21 | 24.22 | 50 | 25.36 | 35.11 | 23.33 | 455 | 0.23 |
| 133 | 22.00 | 35.23 | 24.41 | 75 | 23.24 | 35.15 | 23.99 | 392 | 0.34 |
| 165 | 21.23 | 35.19 | 24.59 | 100 | 22.63 | 35.21 | 24.21 | 371 | 0.43 |
| 197 | 18.56 | 34.93 | 25.10 | 150 | 21.50 | 35.21 | 24.53 | 341 | 0.61 |
| 230 | 15.50 | 34.52 | 25.51 | 200 | 18.35 | 34.90 | 25.12 | 285 | 0.77 |
| 262 | 14.02 | 34.40 | 25.74 | 250 | 14.60 | 34.44 | 25.64 | 235 | 0.90 |
| 328 | 11.02 | 34.17 | 26.15 | 300 | 12.22 | 34.24 | 25.97 | 204 | 1.02 |
| 394 | 8.84 | 34.15 | 26.50 | 400 | 8.72 | 34.15 | 26.51 | 152 | 1.20 |
| 458 | 7.58 | 34.19 | 26.72 | 500 | (6.91) | (34.20) | (26.82) | (123) | (1.35) |
| | | | | 600 | (5.91) | (34.25) | (26.99) | (107) | (1.47) |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 10 | HUGH M. SMITH; September 9, 1952; 0318 GCT; 20°16'N, 158°15'W; sounding, 2500 fm; wind, 080°, 19 kt; weather, precipitation within sight; sea, rough; wire angle, 25°. | | | | | | | | |
| 0 | 26.20 | 35.01 | 23.00 | 0 | 26.20 | 35.01 | 22.99 | 488 | 0.00 |
| 24 | 26.20 | 35.04 | 23.02 | 10 | 26.20 | 35.02 | 23.00 | 487 | 0.05 |
| 47 | 25.90 | 35.00 | 23.08 | 20 | 26.20 | 35.03 | 23.01 | 486 | 0.10 |
| 95 | 25.06 | 35.03 | 23.37 | 30 | 26.20 | 35.04 | 23.02 | 485 | 0.15 |
| 141 | 21.86 | 35.15 | 24.39 | 50 | 25.88 | 35.00 | 23.09 | 479 | 0.24 |
| 188 | 19.32 | 34.96 | 24.93 | 75 | 25.87 | 35.00 | 23.09 | 478 | 0.36 |
| 235 | 15.55 | 34.52 | 25.50 | 100 | 24.89 | 35.04 | 23.42 | 447 | 0.48 |
| 282 | 12.34 | 34.19 | 25.92 | 150 | 21.58 | 35.14 | 24.46 | 348 | 0.68 |
| 329 | 10.19 | 34.13 | 26.26 | 200 | 18.69 | 34.91 | 25.04 | 306 | 0.84 |
| 377 | 8.90 | 34.12 | 26.46 | 250 | 14.98 | 34.45 | 25.57 | 242 | 0.98 |
| 472 | 7.32 | - | | 300 | 11.29 | 34.15 | 26.08 | 194 | 1.09 |
| 566 | 6.14 | 34.23 | 26.95 | 400 | 8.48 | 34.13 | 26.53 | 150 | 1.27 |
| 664 | 5.56 | 34.29 | 27.07 | 500 | 6.90 | 34.19 | 26.81 | 124 | 1.42 |
| | | | | 600 | 5.92 | 34.25 | 26.99 | 107 | 1.54 |
| 11 | HUGH M. SMITH; September 9, 1952; 0940 GCT; 19°26'N, 158°15'W; sounding, 2300 fm; wind, 150°, 6 kt; weather, cloudy; sea, moderate; wire angle, 12°. | | | | | | | | |
| 0 | 26.01 | 35.01 | 23.06 | 0 | 26.01 | 35.01 | 23.05 | 482 | 0.00 |
| 24 | 26.02 | 35.04 | 23.08 | 10 | 26.01 | 35.02 | 23.06 | 481 | 0.05 |
| 47 | 25.92 | 35.01 | 23.09 | 20 | 26.02 | 35.03 | 23.07 | 481 | 0.10 |
| 92 | 24.23 | 35.08 | 23.65 | 30 | 26.01 | 35.03 | 23.07 | 481 | 0.14 |
| 140 | 22.01 | 35.17 | 24.36 | 50 | 25.90 | 35.01 | 23.09 | 479 | 0.24 |
| 187 | 19.66 | 35.09 | 24.94 | 75 | 25.35 | 35.03 | 23.27 | 462 | 0.36 |
| 233 | 16.00 | 34.59 | 25.45 | 100 | 23.88 | 35.10 | 23.77 | 414 | 0.47 |
| 280 | 11.95 | 34.21 | 26.01 | 150 | 21.54 | 35.16 | 24.48 | 346 | 0.66 |
| 327 | 10.04 | 34.12 | 26.28 | 200 | 18.81 | 34.99 | 25.08 | 289 | 0.82 |
| 374 | 8.53 | 34.10 | 26.51 | 250 | 14.28 | 34.42 | 25.69 | 230 | 0.96 |
| 468 | 7.20 | 34.25 | 26.82 | 300 | 11.11 | 34.16 | 26.12 | 190 | 1.06 |
| 562 | 6.42 | 34.34 | 27.00 | 400 | 8.01 | 34.14 | 26.61 | 143 | 1.24 |
| 659 | 5.66 | 34.36 | 27.11 | 500 | 6.92 | 34.30 | 26.89 | 116 | 1.37 |
| | | | | 600 | 6.12 | 34.35 | 27.04 | 102 | 1.49 |
| 12 | HUGH M. SMITH; September 9, 1952; 1850 GCT; 18°52'N, 157°21'W; sounding, 2200 fm; wind, 110°, 18 kt; weather, partly cloudy; sea, rough; wire angle, 08°. | | | | | | | | |
| 3 | 26.30 | 34.99 | 22.95 | 0 | (26.30) | (34.99) | (22.95) | (492) | (0.00) |
| 27 | 25.58 | 35.07 | 23.24 | 10 | 26.30 | 34.99 | 22.95 | 492 | 0.05 |
| 51 | 25.16 | 35.07 | 23.37 | 20 | 26.00 | 35.03 | 23.07 | 480 | 0.10 |
| 98 | 22.10 | 35.20 | 24.36 | 30 | 25.57 | 35.07 | 23.24 | 464 | 0.14 |
| 146 | 20.16 | 35.10 | 24.81 | 50 | 25.20 | 35.07 | 23.35 | 454 | 0.24 |
| 194 | 17.60 | 34.78 | 25.22 | 75 | 24.52 | 35.09 | 23.57 | 433 | 0.35 |
| 243 | 13.70 | 34.45 | 25.84 | 100 | 22.02 | 35.20 | 24.38 | 356 | 0.45 |
| 291 | 11.08 | 34.19 | 26.15 | 150 | 19.90 | 35.07 | 24.86 | 310 | 0.62 |
| 339 | 9.20 | 34.11 | 26.41 | 200 | 17.40 | 34.76 | 25.25 | 273 | 0.76 |
| 387 | 7.83 | 34.16 | 26.66 | 250 | 13.00 | 34.37 | 25.92 | 209 | 0.89 |
| 484 | 6.56 | 34.14 | 26.82 | 300 | 10.72 | 34.17 | 26.19 | 183 | 0.99 |
| 582 | 5.73 | 34.20 | 26.98 | 400 | 7.60 | 34.17 | 26.70 | 135 | 1.16 |
| 680 | 5.35 | 34.30 | 27.10 | 500 | 6.40 | 34.14 | 26.84 | 122 | 1.29 |
| | | | | 600 | 5.63 | 34.21 | 26.99 | 107 | 1.41 |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; September 10, 1952; 0042 GCT; 19°29'N, 157°16'W; sounding, 2000 fm; wind, 050°, 11 kt; weather, partly cloudy; sea, rough; wire angle, 15°. | | | | | | | | | 13 |
| 0 | 24.78 | 35.25 | 23.62 | 0 | 24.78 | 35.25 | 23.61 | 429 | 0.00 |
| 25 | 22.96 | 35.16 | 24.09 | 10 | 24.20 | 35.20 | 23.75 | 416 | 0.04 |
| 49 | 21.96 | 35.17 | 24.38 | 20 | 23.22 | 35.17 | 24.01 | 390 | 0.08 |
| 97 | 20.38 | 35.15 | 24.79 | 30 | 22.70 | 35.16 | 24.16 | 376 | 0.12 |
| 145 | 18.41 | 34.91 | 25.12 | 50 | 21.88 | 35.17 | 24.40 | 354 | 0.19 |
| 193 | 15.46 | 34.52 | 25.52 | 75 | 21.00 | 35.16 | 24.63 | 332 | 0.28 |
| 242 | 12.69 | 34.24 | 25.89 | 100 | 20.24 | 35.14 | 24.82 | 314 | 0.36 |
| 291 | 10.64 | 34.16 | 26.20 | 150 | 18.19 | 34.88 | 25.15 | 282 | 0.51 |
| 340 | 9.42 | 34.07 | 26.34 | 200 | 15.11 | 34.47 | 25.55 | 244 | 0.65 |
| 388 | 8.16 | 34.05 | 26.53 | 250 | 12.40 | 34.23 | 25.93 | 208 | 0.76 |
| 485 | 6.75 | 34.14 | 26.80 | 300 | 10.43 | 34.14 | 26.22 | 180 | 0.86 |
| 582 | 5.61 | 34.32 | 27.08 | 400 | 7.97 | 34.05 | 26.55 | 149 | 1.03 |
| 680 | 5.10 | 34.40 | 27.21 | 500 | 6.53 | 34.18 | 26.85 | 120 | 1.18 |
| | | | | 600 | 5.50 | 34.34 | 27.11 | 96 | 1.29 |
| HUGH M. SMITH; September 10, 1952; 0705 GCT; 20°15'N, 157°22'W; sounding, 2100 fm; wind, 120°, 13 kt; weather, intermittent moderate rain; sea, moderate; wire angle, 32°. | | | | | | | | | 14 |
| 0 | 24.51 | 35.22 | 23.68 | 0 | 24.51 | 35.22 | 23.67 | 423 | 0.00 |
| 17 | 24.52 | 35.22 | 23.67 | 10 | 24.51 | 35.22 | 23.67 | 423 | 0.04 |
| 35 | 23.34 | 35.13 | 23.95 | 20 | 24.52 | 35.22 | 23.67 | 423 | 0.08 |
| 71 | 22.06 | 35.16 | 24.34 | 30 | 23.98 | 35.16 | 23.78 | 412 | 0.13 |
| 108 | 20.68 | 35.15 | 24.71 | 50 | 22.75 | 35.14 | 24.13 | 379 | 0.21 |
| 144 | 19.30 | 35.07 | 25.02 | 75 | 22.00 | 35.16 | 24.35 | 358 | 0.30 |
| 181 | 16.75 | 34.70 | 25.36 | 100 | 21.14 | 35.16 | 24.59 | 335 | 0.39 |
| 217 | 14.60 | 34.50 | 25.69 | 150 | 19.00 | 35.03 | 25.06 | 291 | 0.54 |
| 253 | 12.76 | 34.31 | 25.93 | 200 | 15.67 | 34.60 | 25.53 | 246 | 0.68 |
| 289 | 10.82 | 34.18 | 26.19 | 250 | 12.99 | 34.33 | 25.89 | 211 | 0.80 |
| 363 | 8.92 | 34.13 | 26.47 | 300 | 10.53 | 34.17 | 26.23 | 180 | 0.90 |
| 437 | 7.10 | 34.13 | 26.74 | 400 | 7.83 | 34.12 | 26.62 | 142 | 1.07 |
| 511 | 6.08 | 34.23 | 26.96 | 500 | 6.23 | 34.21 | 26.92 | 114 | 1.20 |
| | | | | 600 | (5.45) | (34.34) | (27.12) | (95) | (1.31) |
| HUGH M. SMITH; September 10, 1952; 1247 GCT; 20°43'N, 157°26'W; sounding, 1500 fm; wind, 090°, 6 kt; weather, cloudy; sea, slight; wire angle, 10°. | | | | | | | | | 15 |
| 0 | 25.92 | 35.03 | 23.10 | 0 | 25.92 | 35.03 | 23.10 | 478 | 0.00 |
| 24 | 25.86 | 35.06 | 23.14 | 10 | 25.90 | 35.04 | 23.11 | 476 | 0.05 |
| 48 | 25.62 | 35.01 | 23.18 | 20 | 25.89 | 35.05 | 23.12 | 475 | 0.10 |
| 95 | 23.41 | 35.10 | 23.91 | 30 | 25.80 | 35.05 | 23.15 | 473 | 0.14 |
| 143 | 21.06 | 35.10 | 24.57 | 50 | 25.60 | 35.01 | 23.18 | 470 | 0.24 |
| 192 | 19.18 | 34.99 | 24.99 | 75 | 25.20 | 35.02 | 23.31 | 457 | 0.35 |
| 240 | 15.38 | 34.52 | 25.54 | 100 | 23.33 | 35.11 | 23.94 | 398 | 0.46 |
| 288 | 13.04 | 34.29 | 25.85 | 150 | 21.00 | 35.10 | 24.58 | 336 | 0.65 |
| 335 | 9.88 | 34.12 | 26.30 | 200 | 18.70 | 34.94 | 25.07 | 290 | 0.81 |
| 383 | 8.91 | 34.14 | 26.48 | 250 | 14.68 | 34.45 | 25.63 | 236 | 0.94 |
| 479 | 7.44 | 34.18 | 26.73 | 300 | 12.40 | 34.24 | 25.94 | 207 | 1.06 |
| 575 | 6.32 | 34.23 | 26.92 | 400 | 8.61 | 34.15 | 26.53 | 151 | 1.24 |
| 672 | 5.52 | 34.39 | 27.15 | 500 | 7.15 | 34.19 | 26.78 | 127 | 1.39 |
| | | | | 600 | 6.09 | 34.26 | 26.97 | 109 | 1.52 |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 16 | HUGH M. SMITH; September 10, 1952; 2118 GCT; 21°48'N, 157°18'W; sounding, 1900 fm; wind, 080°, 16 kt; weather, cloudy; sea, moderate; wire angle, 25°. | | | | | | | | |
| 0 | 25.19 | 35.13 | 23.40 | 0 | 25.19 | 35.13 | 23.40 | 449 | 0.00 |
| 23 | 25.13 | 35.09 | 23.39 | 10 | 25.15 | 35.11 | 23.39 | 449 | 0.04 |
| 45 | 25.08 | 35.11 | 23.42 | 20 | 25.14 | 35.10 | 23.39 | 450 | 0.09 |
| 91 | 22.72 | 35.16 | 24.16 | 30 | 25.10 | 35.10 | 23.40 | 449 | 0.14 |
| 135 | 21.82 | 35.25 | 24.48 | 50 | 25.05 | 35.11 | 23.43 | 447 | 0.22 |
| 181 | 19.92 | 35.16 | 24.92 | 75 | 23.26 | 35.14 | 23.98 | 394 | 0.33 |
| 226 | 17.55 | 34.81 | 25.25 | 100 | 22.58 | 35.18 | 24.21 | 372 | 0.43 |
| 271 | 14.52 | 34.44 | 25.66 | 150 | 21.50 | 35.25 | 24.56 | 338 | 0.61 |
| 317 | 11.40 | 34.19 | 26.09 | 200 | 18.99 | 35.05 | 25.08 | 326 | 0.77 |
| 362 | 9.46 | 34.11 | 26.37 | 250 | 15.79 | 34.58 | 25.49 | 250 | 0.90 |
| 452 | 7.09 | 34.12 | 26.74 | 300 | 12.50 | 34.26 | 25.93 | 208 | 1.02 |
| 542 | 5.95 | 34.22 | 26.96 | 400 | 8.29 | 34.10 | 26.54 | 150 | 1.21 |
| 633 | 5.58 | 34.35 | 27.11 | 500 | 6.36 | 34.17 | 26.87 | 119 | 1.35 |
| | | | | 600 | 5.63 | 34.31 | 27.07 | 100 | 1.47 |
| 17 | HUGH M. SMITH; September 11, 1952; 0335 GCT; 22°26'N, 157°16'W; sounding, 2500 fm; wind, 100°, 22 kt; weather, cloudy; sea, rough; wire angle, 15°. | | | | | | | | |
| 0 | 25.30 | 35.22 | 23.44 | 0 | 25.30 | 35.22 | 23.43 | 453 | 0.00 |
| 24 | 25.30 | 35.23 | 23.44 | 10 | 25.30 | 35.22 | 23.43 | 453 | 0.04 |
| 48 | 24.64 | 35.45 | 23.81 | 20 | 25.30 | 35.23 | 23.44 | 445 | 0.09 |
| 95 | 21.49 | 35.26 | 24.58 | 30 | 25.30 | 35.28 | 23.48 | 442 | 0.13 |
| 143 | 20.08 | 35.22 | 24.93 | 50 | 24.46 | 35.45 | 23.86 | 405 | 0.22 |
| 190 | 18.64 | 35.04 | 25.16 | 75 | 22.74 | 35.24 | 24.21 | 372 | 0.32 |
| 237 | 16.01 | 34.66 | 25.50 | 100 | 21.37 | 35.26 | 24.60 | 334 | 0.40 |
| 286 | 13.60 | 34.42 | 25.84 | 150 | 20.00 | 35.21 | 24.94 | 302 | 0.57 |
| 333 | 11.36 | 34.20 | 26.11 | 200 | 18.55 | 35.02 | 25.16 | 281 | 0.72 |
| 380 | 9.42 | 34.14 | 26.40 | 250 | 15.32 | 34.59 | 25.60 | 239 | 0.85 |
| 476 | 7.29 | 34.13 | 26.72 | 300 | 12.93 | 34.35 | 25.92 | 209 | 0.96 |
| 573 | 5.14 | 34.10 | 26.97 | 400 | 8.99 | 34.14 | 26.46 | 157 | 1.16 |
| 669 | 4.62 | 34.22 | 27.12 | 500 | 6.62 | 34.12 | 26.79 | 126 | 1.30 |
| | | | | 600 | 4.95 | 34.13 | 27.01 | 105 | 1.43 |
| 18 | HUGH M. SMITH; September 11, 1952; 1238 GCT; 21°45'N, 156°20'W; sounding, 3000 fm; wind, 100°, 19 kt; weather, partly cloudy; sea, moderate; wire angle, 28°. | | | | | | | | |
| 0 | 25.10 | 35.14 | 23.44 | 0 | 25.10 | 35.14 | 23.43 | 446 | 0.00 |
| 21 | 25.12 | 35.14 | 23.43 | 10 | 25.11 | 35.14 | 23.43 | 446 | 0.04 |
| 42 | 25.00 | 35.32 | 23.60 | 20 | 25.12 | 35.14 | 23.43 | 446 | 0.09 |
| 84 | 22.61 | 35.22 | 24.23 | 30 | 25.07 | 35.20 | 23.49 | 440 | 0.13 |
| 126 | 21.56 | 35.29 | 24.58 | 50 | 24.92 | 35.35 | 23.65 | 426 | 0.22 |
| 170 | 19.94 | 35.22 | 24.96 | 75 | 23.01 | 35.23 | 24.12 | 380 | 0.32 |
| 212 | 17.36 | 34.79 | 25.28 | 100 | 21.99 | 35.27 | 24.44 | 350 | 0.41 |
| 256 | 14.88 | 34.50 | 25.63 | 150 | 20.96 | 35.28 | 24.73 | 322 | 0.58 |
| 298 | 11.74 | 34.20 | 26.04 | 200 | 18.75 | 35.03 | 25.12 | 285 | 0.74 |
| 341 | 10.52 | 34.16 | 26.23 | 250 | 15.34 | 34.55 | 25.56 | 243 | 0.87 |
| 427 | 8.08 | 34.08 | 26.56 | 300 | 11.62 | 34.20 | 26.05 | 196 | 0.99 |
| 514 | 7.02 | 34.21 | 26.82 | 400 | 8.68 | 34.09 | 26.47 | 156 | 1.17 |
| 601 | 5.83 | 34.22 | 26.98 | 500 | 7.23 | 34.19 | 26.77 | 128 | 1.32 |
| | | | | 600 | 5.84 | 34.22 | 26.97 | 109 | 1.45 |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; September 11, 1952; 1807 GCT; 21°17'N, 156°16'W; sounding, 600 fm; wind, 090°, 21 kt; weather, cloudy; sea, moderate; wire angle, 08°. | | | | | | | | | 19 |
| 0 | 25.59 | 35.09 | 23.25 | 0 | 25.59 | 35.09 | 23.24 | 464 | 0.00 |
| 24 | 25.58 | 35.10 | 23.26 | 10 | 25.59 | 35.09 | 23.24 | 464 | 0.05 |
| 47 | 24.08 | 35.22 | 23.80 | 20 | 25.58 | 35.10 | 23.26 | 463 | 0.09 |
| 95 | 22.02 | 35.28 | 24.44 | 30 | 25.54 | 35.10 | 23.27 | 462 | 0.14 |
| 143 | 20.84 | 35.29 | 24.77 | 50 | 23.90 | 35.23 | 23.86 | 405 | 0.23 |
| 190 | 18.97 | 35.04 | 25.08 | 75 | 22.60 | 35.27 | 24.27 | 366 | 0.32 |
| 236 | 16.10 | 34.62 | 25.45 | 100 | 21.80 | 35.29 | 24.51 | 343 | 0.41 |
| 285 | 12.58 | 34.28 | 25.94 | 150 | 20.66 | 35.28 | 24.81 | 314 | 0.58 |
| 332 | 10.62 | 34.18 | 26.22 | 200 | 18.40 | 34.95 | 25.15 | 282 | 0.73 |
| 381 | 9.12 | - | | 250 | 15.36 | 34.54 | 25.55 | 244 | 0.87 |
| 476 | 6.94 | 34.15 | 26.78 | 300 | 11.94 | 34.23 | 26.02 | 199 | 0.98 |
| 572 | 6.02 | 34.27 | 27.00 | 400 | 8.61 | 34.10 | 26.49 | 155 | 1.16 |
| 667 | 5.64 | 34.37 | 27.12 | 500 | 6.62 | 34.19 | 26.85 | 120 | 1.31 |
| | | | | 600 | 5.88 | 34.31 | 27.04 | 102 | 1.43 |
| HUGH M. SMITH; September 12, 1952; 0006 GCT; 21°02'N, 155°37'W; sounding, 2300 fm; wind, 110°, 13 kt; weather, partly cloudy; sea, slight; wire angle, 25°. | | | | | | | | | 20 |
| 0 | 25.21 | 35.28 | 23.51 | 0 | 25.21 | 35.28 | 23.50 | 439 | 0.00 |
| 23 | 25.06 | 35.31 | 23.58 | 10 | 25.12 | 35.31 | 23.55 | 434 | 0.04 |
| 46 | 24.96 | 35.30 | 23.60 | 20 | 25.06 | 35.31 | 23.57 | 432 | 0.09 |
| 91 | 22.33 | 35.22 | 24.31 | 30 | 25.04 | 35.30 | 23.57 | 433 | 0.13 |
| 136 | 21.19 | 35.28 | 24.67 | 50 | 24.97 | 35.30 | 23.59 | 430 | 0.22 |
| 181 | 19.98 | 35.22 | 24.95 | 75 | 23.40 | 35.22 | 24.00 | 392 | 0.32 |
| 226 | 17.68 | 34.84 | 25.25 | 100 | 22.11 | 35.23 | 24.38 | 356 | 0.41 |
| 272 | 14.21 | 34.42 | 25.71 | 150 | 20.62 | 35.27 | 24.82 | 314 | 0.58 |
| 317 | 11.71 | 34.22 | 26.06 | 200 | 19.39 | 35.14 | 25.04 | 292 | 0.74 |
| 363 | 9.24 | 34.13 | 26.42 | 250 | 16.42 | 34.69 | 25.43 | 256 | 0.88 |
| 455 | 7.32 | 34.06 | 26.65 | 300 | 12.72 | 34.28 | 25.91 | 210 | 1.00 |
| 546 | 6.21 | 34.20 | 26.92 | 400 | 8.34 | 34.08 | 26.52 | 152 | 1.19 |
| 639 | 5.60 | 34.29 | 27.06 | 500 | 6.70 | 34.14 | 26.80 | 125 | 1.33 |
| | | | | 600 | 5.80 | 34.26 | 27.01 | 105 | 1.46 |
| HUGH M. SMITH; September 12, 1952; 0505 GCT; 20°28'N, 155°37'W; sounding, 1500 fm; wind, 090°, 20 kt; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | 21 |
| 0 | 25.51 | 35.05 | 23.24 | 0 | 25.51 | 35.05 | 23.24 | 464 | 0.00 |
| 23 | 25.51 | 35.06 | 23.25 | 10 | 25.51 | 35.05 | 23.24 | 464 | 0.05 |
| 47 | 25.02 | 35.26 | 23.55 | 20 | 25.51 | 35.06 | 23.25 | 464 | 0.09 |
| 94 | 23.50 | 35.22 | 23.98 | 30 | 25.46 | 35.08 | 23.28 | 460 | 0.14 |
| 142 | 21.34 | 35.26 | 24.62 | 50 | 25.00 | 35.26 | 23.55 | 434 | 0.23 |
| 189 | 19.50 | 35.11 | 24.99 | 75 | 24.81 | 35.26 | 23.61 | 429 | 0.34 |
| 237 | 17.11 | 34.76 | 25.32 | 100 | 23.44 | 35.22 | 23.99 | 393 | 0.44 |
| 284 | 13.22 | 34.31 | 25.83 | 150 | 21.04 | 35.25 | 24.69 | 326 | 0.62 |
| 332 | 10.56 | 34.17 | 26.23 | 200 | 19.10 | 35.06 | 25.06 | 291 | 0.78 |
| 380 | 9.08 | 34.13 | 26.44 | 250 | 16.10 | 34.64 | 25.46 | 254 | 0.92 |
| 476 | 7.18 | 34.18 | 26.77 | 300 | 12.25 | 34.25 | 25.97 | 204 | 1.04 |
| 572 | 5.49 | 34.21 | 27.01 | 400 | 8.62 | 34.14 | 26.52 | 152 | 1.22 |
| 668 | 5.26 | 34.34 | 27.14 | 500 | 6.62 | 34.19 | 26.85 | 120 | 1.37 |
| | | | | 600 | 5.38 | 34.25 | 27.05 | 101 | 1.48 |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 22 | HUGH M. SMITH; September 12, 1952; 1113 GCT; 20°12'N, 156°19'W; sounding, 800 fm; wind, 090°, 22 kt; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | |
| 0 | 25.70 | 35.05 | 23.18 | 0 | 25.70 | 35.05 | 23.18 | 470 | 0.00 |
| 24 | 25.70 | 35.01 | 23.15 | 10 | 25.70 | 35.03 | 23.17 | 471 | 0.05 |
| 48 | 25.64 | 35.00 | 23.17 | 20 | 25.70 | 35.01 | 23.15 | 473 | 0.09 |
| 97 | 22.32 | 35.12 | 24.24 | 30 | 25.68 | 35.00 | 23.15 | 473 | 0.14 |
| 145 | 20.61 | 35.12 | 24.71 | 50 | 25.63 | 35.00 | 23.16 | 472 | 0.24 |
| 193 | 18.74 | 34.98 | 25.09 | 75 | 23.41 | 35.11 | 23.91 | 400 | 0.35 |
| 241 | 15.06 | 34.50 | 25.59 | 100 | 22.21 | 35.12 | 24.26 | 366 | 0.44 |
| 289 | 12.96 | 34.32 | 25.90 | 150 | 20.48 | 35.12 | 24.74 | 321 | 0.62 |
| 337 | 10.40 | 34.18 | 26.26 | 200 | 18.45 | 34.94 | 25.13 | 284 | 0.77 |
| 385 | 9.06 | 34.17 | 26.48 | 250 | 14.58 | 34.45 | 25.65 | 234 | 0.90 |
| 482 | 7.04 | 34.22 | 26.82 | 300 | 12.41 | 34.29 | 25.97 | 204 | 1.02 |
| 578 | 6.12 | 34.26 | 26.98 | 400 | 8.62 | 34.18 | 26.55 | 149 | 1.20 |
| 674 | 5.53 | 34.36 | 27.13 | 500 | 6.84 | 34.23 | 26.85 | 120 | 1.34 |
| | | | | 600 | 5.95 | 34.29 | 27.01 | 105 | 1.46 |
| 23 | HUGH M. SMITH; September 12, 1952; 1732 GCT; 19°30'N, 156°15'W; sounding, 2300 fm; wind, 030°, 13 kt; weather, partly cloudy; sea, smooth; wire angle, 17°. | | | | | | | | |
| 0 | 26.31 | 34.98 | 22.94 | 0 | 26.31 | 34.98 | 22.94 | 493 | 0.00 |
| 21 | 26.06 | 34.97 | 23.01 | 10 | 26.20 | 34.98 | 22.97 | 490 | 0.05 |
| 41 | 25.89 | 34.96 | 23.06 | 20 | 26.08 | 34.97 | 23.00 | 487 | 0.10 |
| 83 | 25.16 | 34.98 | 23.30 | 30 | 25.99 | 34.96 | 23.02 | 485 | 0.15 |
| 125 | 22.10 | 35.11 | 24.29 | 50 | 25.83 | 34.96 | 23.07 | 481 | 0.24 |
| 166 | 20.58 | 35.18 | 24.76 | 75 | 25.38 | 34.97 | 23.22 | 466 | 0.36 |
| 208 | 18.17 | 34.86 | 25.14 | 100 | 24.97 | 34.98 | 23.35 | 454 | 0.48 |
| 249 | 14.28 | 34.39 | 25.68 | 150 | 21.00 | 35.17 | 24.64 | 331 | 0.68 |
| 291 | 11.41 | 34.13 | 26.04 | 200 | 18.65 | 34.93 | 25.07 | 290 | 0.84 |
| 332 | 9.72 | 34.12 | 26.33 | 250 | 14.20 | 34.38 | 25.68 | 232 | 0.97 |
| 417 | 8.15 | 34.15 | 26.60 | 300 | 11.01 | 34.13 | 26.11 | 190 | 1.08 |
| 501 | 6.66 | 34.19 | 26.85 | 400 | 8.43 | 34.14 | 26.55 | 149 | 1.25 |
| 587 | 5.98 | 34.30 | 27.02 | 500 | 6.68 | 34.19 | 26.84 | 121 | 1.40 |
| | | | | 600 | (5.92) | (34.32) | (27.04) | (102) | (1.52) |
| 24 | HUGH M. SMITH; September 12, 1952; 2335 GCT; 18°46'N, 156°14'W; sounding, 2400 fm; wind, 100°, 15 kt; weather, partly cloudy; sea, slight; wire angle, 25°. | | | | | | | | |
| 0 | 25.98 | 34.99 | 23.05 | 0 | 25.98 | 34.99 | 23.05 | 482 | 0.00 |
| 21 | 25.86 | 34.98 | 23.08 | 10 | 25.95 | 34.99 | 23.06 | 482 | 0.05 |
| 42 | 25.78 | 34.98 | 23.11 | 20 | 25.87 | 34.98 | 23.08 | 480 | 0.10 |
| 85 | 23.12 | 35.07 | 23.97 | 30 | 25.82 | 34.98 | 23.09 | 478 | 0.14 |
| 129 | 21.20 | 35.16 | 24.58 | 50 | 25.67 | 34.98 | 23.14 | 474 | 0.24 |
| 171 | 19.20 | 34.99 | 24.98 | 75 | 24.30 | 35.00 | 23.57 | 447 | 0.35 |
| 214 | 17.32 | 34.76 | 25.27 | 100 | 22.05 | 35.14 | 24.32 | 375 | 0.45 |
| 257 | 14.80 | 34.51 | 25.66 | 150 | 19.92 | 35.07 | 24.85 | 310 | 0.62 |
| 299 | 12.04 | 34.20 | 25.98 | 200 | 18.19 | 34.86 | 25.13 | 284 | 0.78 |
| 341 | 9.77 | 34.14 | 26.34 | 250 | 15.45 | 34.57 | 25.55 | 243 | 0.91 |
| 428 | 7.83 | 34.18 | 26.67 | 300 | 11.98 | 34.20 | 25.99 | 202 | 1.03 |
| 514 | 6.41 | 34.22 | 26.91 | 400 | 8.43 | 34.16 | 26.57 | 148 | 1.21 |
| 599 | 5.74 | 34.31 | 27.06 | 500 | 6.60 | 34.22 | 26.88 | 117 | 1.35 |
| | | | | 600 | (5.72) | (34.32) | (27.07) | (100) | (1.46) |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; September 13, 1952; 0742 GCT; 18°10'N, 155°33'W; sounding, missing; wind, 080°, 21 kt; weather, cloudy; sea, moderate; wire angle, 35°. | | | | | | | | | 25 |
| 0 | 25.85 | 34.95 | 23.06 | 0 | 25.85 | 34.95 | 23.06 | 482 | 0.00 |
| 21 | 25.86 | 34.95 | 23.06 | 10 | 25.85 | 34.95 | 23.06 | 482 | 0.05 |
| 41 | 25.77 | 34.97 | 23.10 | 20 | 25.86 | 34.95 | 23.06 | 482 | 0.10 |
| 81 | 23.65a) | 35.20 | 23.92a) | 30 | 25.80 | 34.96 | 23.08 | 479 | 0.14 |
| 122 | 21.28 | 35.21 | 24.60 | 50 | 25.71 | 34.98 | 23.12 | 475 | 0.24 |
| 164 | 20.40 | 35.26 | 24.87 | 75 | 24.25 | 35.18 | 23.72 | 418 | 0.35 |
| 205 | 18.70 | 34.96 | 25.08 | 100 | 22.42 | 35.20 | 24.27 | 366 | 0.45 |
| 245 | 14.94 | 34.42 | 25.56 | 150 | 20.70 | 35.25 | 24.78 | 317 | 0.62 |
| 287 | 12.04 | 34.16 | 25.95 | 200 | 19.00 | 35.01 | 25.04 | 292 | 0.78 |
| 328 | 10.14 | 34.16 | 26.29 | 250 | 14.40 | 34.36 | 25.62 | 237 | 0.92 |
| 410 | 7.91 | 34.14 | 26.63 | 300 | 11.27 | 34.15 | 26.08 | 194 | 1.03 |
| 492 | 6.64 | 34.22 | 26.87 | 400 | 8.14 | 34.14 | 26.59 | 145 | 1.20 |
| 574 | 5.98 | 34.29 | 27.02 | 500 | 6.58 | 34.23 | 26.89 | 117 | 1.34 |
| | | | | 600 | (5.82) | (34.31) | (27.05) | (102) | (1.46) |
| HUGH M. SMITH; September 13, 1952; 1340 GCT; 18°49'N, 155°32'W; sounding, 2300 fm; wind, 040°, 18 kt; weather, cloudy; sea, moderate; wire angle, 20°. | | | | | | | | | 26 |
| 0 | 25.31 | 35.05 | 23.30 | 0 | 25.31 | 35.05 | 23.30 | 458 | 0.00 |
| 22 | 25.32 | 35.04 | 23.29 | 10 | 25.31 | 35.05 | 23.30 | 458 | 0.05 |
| 45 | 24.94 | 35.08 | 23.44 | 20 | 25.32 | 35.04 | 23.29 | 459 | 0.09 |
| 90 | 23.14 | 35.23 | 24.09 | 30 | 25.30 | 35.04 | 23.30 | 459 | 0.14 |
| 135 | 20.93 | 35.24 | 24.71 | 50 | 24.67 | 35.11 | 23.54 | 435 | 0.23 |
| 180 | 19.82 | 35.26 | 25.03 | 75 | 23.53 | 35.21 | 23.95 | 396 | 0.33 |
| 226 | 17.36 | 34.79 | 25.28 | 100 | 22.90 | 35.24 | 24.16 | 376 | 0.43 |
| 271 | 13.58 | 34.34 | 25.78 | 150 | 20.38 | 35.26 | 24.87 | 309 | 0.60 |
| 315 | 10.95 | 34.14 | 26.14 | 200 | 19.54 | 35.24 | 25.08 | 289 | 0.76 |
| 363 | 9.46 | 34.18 | 26.42 | 250 | 15.92 | 34.61 | 25.48 | 250 | 0.89 |
| 454 | 7.12 | 34.13 | 26.74 | 300 | 11.65 | 34.17 | 26.03 | 199 | 1.01 |
| 547 | 6.16 | 34.26 | 26.97 | 400 | 8.33 | 34.16 | 26.58 | 146 | 1.19 |
| 639 | 5.68 | 34.38 | 27.12 | 500 | 6.59 | 34.18 | 26.85 | 121 | 1.33 |
| | | | | 600 | 5.83 | 34.34 | 27.07 | 100 | 1.45 |
| HUGH M. SMITH; September 13, 1952; 2128 GCT; 18°46'N, 154°39'W; sounding, 2900 fm; wind, 050°, 14 kt; weather, cloudy; sea, moderate; wire angle, 25°. | | | | | | | | | 27 |
| 0 | 25.29 | 35.28 | 23.48 | 0 | 25.29 | 35.28 | 23.48 | 441 | 0.00 |
| 21 | 25.18 | 35.26 | 23.50 | 10 | 25.24 | 35.27 | 23.49 | 440 | 0.04 |
| 42 | 24.98 | 35.26 | 23.56 | 20 | 25.19 | 35.26 | 23.50 | 440 | 0.09 |
| 85 | 22.10 | 35.27 | 24.41 | 30 | 25.08 | 35.26 | 23.53 | 432 | 0.13 |
| 128 | 20.54 | 35.25 | 24.83 | 50 | 24.81 | 35.27 | 23.62 | 428 | 0.22 |
| 171 | 19.62 | 35.19 | 25.02 | 75 | 22.65 | 35.27 | 24.25 | 367 | 0.32 |
| 215 | 16.72 | 34.69 | 25.36 | 100 | 21.52 | 35.27 | 24.57 | 337 | 0.41 |
| 258 | 12.91 | 34.24 | 25.84 | 150 | 20.06 | 35.22 | 24.93 | 303 | 0.57 |
| 301 | 10.52 | 34.13 | 26.20 | 200 | 18.12 | 34.93 | 25.20 | 277 | 0.72 |
| 345 | 9.00 | 34.09 | 26.43 | 250 | 13.42 | 34.29 | 25.77 | 223 | 0.85 |
| 431 | 7.70 | 34.18 | 26.69 | 300 | 10.59 | 34.13 | 26.19 | 184 | 0.95 |
| 520 | 6.30 | 34.23 | 26.93 | 400 | 8.16 | 34.14 | 26.59 | 145 | 1.12 |
| 607 | 5.88 | 34.35 | 27.08 | 500 | 6.54 | 34.22 | 26.88 | 117 | 1.26 |
| | | | | 600 | 5.90 | 34.34 | 27.06 | 100 | 1.38 |

a) Duplicate values: temperature, 23.85°C; sigma-t, 23.86 g/L.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

28

HUGH M. SMITH; September 14, 1952; 0403 GCT; 19°30'N, 154°26'W; sounding, missing; wind, 090°, 13 kt; weather, cloudy; sea, moderate; wire angle, missing.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.40 | 35.29 | 23.46 | 0 | 25.40 | 35.29 | 23.45 | 444 | 0.00 |
| 22 | 25.18 | 35.30 | 23.53 | 10 | 25.39 | 35.30 | 23.46 | 443 | 0.04 |
| 45 | 24.86 | 35.27 | 23.61 | 20 | 25.21 | 35.30 | 23.52 | 437 | 0.09 |
| 91 | 22.04 | 35.26 | 24.42 | 30 | 25.08 | 35.29 | 23.55 | 434 | 0.13 |
| 136 | 20.50 | 35.28 | 24.86 | 50 | 24.70 | 35.26 | 23.64 | 426 | 0.22 |
| 181 | 18.32 | 34.95 | 25.17 | 75 | 22.80 | 35.26 | 24.20 | 372 | 0.32 |
| 228 | 16.09 | 34.62 | 25.45 | 100 | 21.52 | 35.27 | 24.57 | 337 | 0.41 |
| 273 | 12.25 | 34.24 | 25.97 | 150 | 20.08 | 35.25 | 24.95 | 302 | 0.57 |
| 318 | 10.10 | 34.12 | 26.27 | 200 | 17.25 | 34.78 | 25.30 | 268 | 0.71 |
| 364 | 8.81 | 34.09 | 26.45 | 250 | 14.73 | 34.47 | 25.64 | 236 | 0.84 |
| 455 | 7.28 | 34.19 | 26.76 | 300 | 10.79 | 34.16 | 26.17 | 185 | 0.95 |
| 546 | 6.05 | 34.24 | 26.97 | 400 | 8.23 | 34.12 | 26.56 | 148 | 1.13 |
| 639 | 5.64 | 34.35 | 27.10 | 500 | 6.60 | 34.21 | 26.87 | 119 | 1.27 |
| | | | | 600 | 5.77 | 34.30 | 27.05 | 102 | 1.38 |

29

HUGH M. SMITH; September 14, 1952; 1036 GCT; 20°13'N, 154°28'W; sounding, missing; wind, 090°, 8 kt; weather, cloudy; sea, slight; wire angle, 08°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.21 | 35.07 | 23.35 | 0 | 25.21 | 35.07 | 23.35 | 454 | 0.00 |
| 24 | 25.23 | 35.09 | 23.36 | 10 | 25.22 | 35.08 | 23.35 | 453 | 0.04 |
| 48 | 24.68 | 35.17 | 23.58 | 20 | 25.23 | 35.09 | 23.36 | 453 | 0.09 |
| 95 | 21.77 | 35.20 | 24.45 | 30 | 25.23 | 35.10 | 23.36 | 452 | 0.14 |
| 144 | 20.48 | 35.25 | 24.84 | 50 | 24.55 | 35.17 | 23.62 | 457 | 0.22 |
| 192 | 18.65 | 34.98 | 25.11 | 75 | 23.38 | 35.19 | 23.98 | 393 | 0.33 |
| 240 | 15.51 | 34.53 | 25.52 | 100 | 21.52 | 35.20 | 24.52 | 342 | 0.42 |
| 288 | 12.34 | 34.24 | 25.95 | 150 | 20.20 | 35.23 | 24.90 | 306 | 0.58 |
| 337 | 9.84 | 34.10 | 26.30 | 200 | 18.36 | 34.94 | 25.15 | 282 | 0.74 |
| 384 | 8.60 | 34.04 | 26.45 | 250 | 14.78 | 34.45 | 25.61 | 238 | 0.87 |
| 482 | 6.56 | 34.08 | 26.78 | 300 | 11.79 | 34.21 | 26.03 | 199 | 0.98 |
| 579 | 5.85 | 34.25 | 27.00 | 400 | 8.25 | 34.04 | 26.50 | 154 | 1.16 |
| 677 | 5.48 | 34.37 | 27.14 | 500 | 6.37 | 34.10 | 26.81 | 124 | 1.31 |
| | | | | 600 | 5.73 | 34.30 | 27.05 | 102 | 1.43 |

30

HUGH M. SMITH; September 14, 1952; 1719 GCT; 20°54'N, 154°30'W; sounding, 2900 fm; wind, 080°, 16 kt; weather, cloudy; sea, moderate; wire angle, 10°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.27 | 35.16 | 23.40 | 0 | 25.27 | 35.16 | 23.40 | 449 | 0.00 |
| 23 | 25.26 | 35.16 | 23.40 | 10 | 25.27 | 35.16 | 23.40 | 449 | 0.04 |
| 46 | 25.17 | 35.15 | 23.42 | 20 | 25.26 | 35.16 | 23.40 | 450 | 0.09 |
| 92 | 22.04 | 35.30 | 24.45 | 30 | 25.24 | 35.15 | 23.40 | 449 | 0.14 |
| 140 | 20.74 | 35.26 | 24.78 | 50 | 25.13 | 35.15 | 23.43 | 446 | 0.22 |
| 187 | 19.46 | 35.16 | 25.04 | 75 | 23.35 | 35.25 | 24.04 | 388 | 0.33 |
| 233 | 17.40 | 34.83 | 25.31 | 100 | 21.83 | 35.30 | 24.51 | 343 | 0.42 |
| 279 | 13.24 | 34.28 | 25.81 | 150 | 20.45 | 35.24 | 24.84 | 312 | 0.59 |
| 326 | 10.90 | 34.13 | 26.14 | 200 | 19.09 | 35.11 | 25.10 | 287 | 0.74 |
| 373 | 9.30 | 34.10 | 26.38 | 250 | 15.80 | 34.59 | 25.49 | 250 | 0.88 |
| 467 | 7.16 | 34.11 | 26.72 | 300 | 11.95 | 34.19 | 25.98 | 202 | 1.00 |
| 562 | 6.16 | 34.26 | 26.97 | 400 | 8.48 | 34.10 | 26.51 | 153 | 1.18 |
| 659 | 5.64 | 34.34 | 27.10 | 500 | 6.74 | 34.16 | 26.81 | 124 | 1.32 |
| | | | | 600 | 5.90 | 34.29 | 27.02 | 104 | 1.45 |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; September 15, 1952; 0328 GCT; 21°44'N, 155°34'W; sounding, missing; wind, 080°, 14 kt; weather, cloudy; sea, moderate; wire angle, 15°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.09 | 35.33 | 23.58 | 0 | 25.09 | 35.33 | 23.58 | 432 | 0.00 |
| 23 | 25.00 | 35.35 | 23.62 | 10 | 25.05 | 35.34 | 23.60 | 430 | 0.04 |
| 46 | 24.95 | 35.35 | 23.64 | 20 | 25.01 | 35.35 | 23.62 | 428 | 0.09 |
| 92 | 22.22 | 35.25 | 24.36 | 30 | 24.99 | 35.35 | 23.62 | 428 | 0.13 |
| 140 | 21.12 | 35.33 | 24.73 | 50 | 24.93 | 35.35 | 23.64 | 426 | 0.21 |
| 187 | 20.60 | 35.34 | 24.88 | 75 | 22.72 | 35.26 | 24.23 | 370 | 0.32 |
| 235 | 19.23 | 35.11 | 25.06 | 100 | 22.01 | 35.25 | 24.42 | 352 | 0.41 |
| 282 | 14.70 | 34.43 | 25.62 | 150 | 21.05 | 35.34 | 24.75 | 320 | 0.58 |
| 329 | 11.68 | 34.17 | 26.02 | 200 | 20.52 | 35.33 | 24.89 | 307 | 0.74 |
| 377 | 9.74 | 34.12 | 26.33 | 250 | 18.35 | 34.98 | 25.18 | 279 | 0.89 |
| 472 | 7.60 | 34.15 | 26.68 | 300 | 13.42 | 34.30 | 25.78 | 222 | 1.02 |
| 567 | 5.96 | 34.16 | 26.92 | 400 | 9.22 | 34.12 | 26.41 | 162 | 1.22 |
| 663 | 5.36 | 34.26 | 27.07 | 500 | 7.02 | 34.15 | 26.76 | 129 | 1.37 |
| | | | | 600 | 5.68 | 34.19 | 26.97 | 109 | 1.49 |

POG

NP-52-1

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| HMCS SAULT STE. MARIE; March 6, 1952; 1200 GCT; 54°18'N, 133°17'W; sounding, 451 m; wind, 300°, force 4; weather, clear; sea, moderate. | | | | | | | | | | | G1 |
| 5 | 6.22 | 32.48 | | 25.56 | 243 | 0 | (6.22) | (32.48) | (25.56) | (243) | (0.00) |
| 20 | 6.23 | 32.48 | | 25.56 | 243 | 10 | 6.23 | 32.48 | 25.56 | 243 | 0.02 |
| 60u | 6.22 | 32.52 | | 25.59 | 240 | 20 | 6.23 | 32.48 | 25.56 | 243 | 0.05 |
| 80 | 5.96 | 32.60 | | 25.69 | 231 | 30 | 6.16 | 32.51 | 25.59 | 240 | 0.07 |
| 100 | 5.96 | 32.60 | | 25.69 | 231 | 50 | 6.04 | 32.56 | 25.64 | 236 | 0.12 |
| 110 | 5.86 | 32.62 | | 25.71 | 229 | 75 | 5.97 | 32.60 | 25.68 | 232 | 0.18 |
| 120 | 5.83 | 32.64 | | 25.73 | 227 | 100 | 5.96 | 32.60 | 25.69 | 231 | 0.24 |
| 130 | 5.86 | 32.64 | | 25.73 | 227 | 150 | 5.99 | 32.73 | 25.78 | 222 | 0.35 |
| 140 | 5.90 | 32.64 | | 25.72 | 228 | 200 | 6.40 | 33.47 | 26.32 | 171 | 0.45 |
| 160 | 6.07 | 32.84 | | 25.86 | 215 | 250 | 6.30 | 33.64 | 26.46 | 158 | 0.54 |
| 200 | 6.40 | 33.47 | | 26.32 | 171 | 300 | 5.63 | 33.81 | 26.68 | 137 | 0.61 |
| 300 | 5.63 | 33.81 | | 26.68 | 137 | | | | | | |
| HMCS SAULT STE. MARIE; March 6, 1952; 1800 GCT; 54°18'N, 134°22'W; sounding, 2874 m; wind, 320°, force 4; weather, clear; sea, moderate. | | | | | | | | | | | G3 |
| 5 | 5.50 | 32.53 | | 25.69 | 231 | 0 | (5.50) | (32.53) | (25.69) | (231) | (0.00) |
| 20 | 5.5 | 32.53 | | 25.69 | 231 | 10 | 5.50 | 32.53 | 25.69 | 231 | 0.02 |
| 40 | 5.49 | 32.53 | | 25.69 | 231 | 20 | 5.50 | 32.53 | 25.69 | 231 | 0.05 |
| 60 | 5.22 | 32.57 | | 25.75 | 225 | 30 | 5.50 | 32.53 | 25.69 | 231 | 0.07 |
| 80 | 5.21 | 32.64 | | 25.81 | 220 | 50 | 5.32 | 32.55 | 25.72 | 228 | 0.12 |
| 100 | 5.09 | 32.67 | | 25.84 | 217 | 75 | 5.22 | 32.63 | 25.80 | 221 | 0.17 |
| 110 | 5.20 | 32.69 | | 25.85 | 216 | 100 | 5.09 | 32.67 | 25.84 | 217 | 0.23 |
| 120 | 5.25 | 32.74 | | 25.88 | 213 | 150 | 6.19 | 33.54 | 26.40 | 164 | 0.32 |
| 130 | 5.37 | 32.95 | | 26.03 | 199 | 200 | 5.66 | 33.79 | 26.66 | 139 | 0.40 |
| 140 | 5.78 | 33.34 | | 26.29 | 174 | 250 | 5.19 | 33.82 | 26.74 | 131 | 0.47 |
| 160 | 6.32 | 33.67 | | 26.48 | 156 | 300 | 4.82 | 33.86 | 26.81 | 125 | 0.53 |
| 180 | 5.76 | 33.76 | | 26.63 | 142 | 400 | 4.63 | 33.96 | 26.91 | 115 | 0.66 |
| 200 | 5.66 | 33.79 | | 26.66 | 139 | 500 | 4.44 | 34.08 | 27.03 | 104 | 0.77 |
| 300 | 4.82 | 33.86 | | 26.81 | 125 | | | | | | |
| 500 | 4.44 | 34.08 | | 27.03 | 104 | | | | | | |
| HMCS SAULT STE. MARIE; March 7, 1952; 0000 GCT; 54°17'N, 135°32'W; sounding, missing; wind, 280°, force 2; weather, clear; sea, slight. | | | | | | | | | | | G5 |
| 5 | 5.33 | 32.53 | | 25.71 | 229 | 0 | (5.33) | (32.53) | (25.71) | (229) | (0.00) |
| 20 | 5.23 | 32.55 | | 25.73 | 227 | 10 | 5.29 | 32.54 | 25.72 | 228 | 0.02 |
| 40 | 5.17 | 32.58 | | 25.76 | 224 | 20 | 5.23 | 32.55 | 25.73 | 227 | 0.05 |
| 60 | 5.12 | 32.62 | | 25.80 | 221 | 30 | 5.20 | 32.56 | 25.74 | 226 | 0.07 |
| 80 | 5.14 | 32.67 | | 25.84 | 217 | 50 | 5.14 | 32.60 | 25.78 | 222 | 0.11 |
| 100 | 6.42 | 33.34 | | 26.21 | 182 | 75 | 5.14 | 32.66 | 25.83 | 218 | 0.17 |
| 110 | 6.32 | 33.53 | | 26.37 | 166 | 100 | 6.42 | 33.34 | 26.21 | 182 | 0.22 |
| 120 | 6.17 | 33.57 | | 26.42 | 162 | 150 | 6.09 | 33.78 | 26.60 | 145 | 0.30 |
| 130 | 6.19 | 33.65 | | 26.48 | 156 | 200 | 5.61 | 33.88 | 26.74 | 131 | 0.37 |
| 140 | 6.09 | 33.74 | | 26.57 | 148 | 250 | 5.13 | 33.89 | 26.80 | 126 | 0.44 |
| 160 | 6.09 | 33.81 | | 26.62 | 143 | 300 | 4.75 | 33.91 | 26.86 | 120 | 0.50 |
| 180 | 5.89 | 33.84 | | 26.67 | 138 | 400 | 4.46 | 34.01 | 26.97 | 110 | 0.62 |
| 200 | 5.61 | 33.88 | | 26.74 | 131 | 500 | 4.19 | 34.10 | 27.07 | 100 | 0.73 |
| 300 | 4.75 | 33.91 | | 26.86 | 120 | 600 | 3.97 | 34.16 | 27.14 | 93 | 0.83 |
| 500 | 4.19 | 34.10 | | 27.07 | 100 | 800 | 3.53 | 34.27 | 27.28 | 80 | 1.01 |
| 800 | 3.53 | 34.27 | | 27.28 | 80 | 1000 | 3.08 | 34.36 | 27.39 | 70 | 1.18 |
| 1000 | 3.08 | 34.36 | | 27.39 | 70 | 1200 | 2.72 | 34.39 | 27.45 | 64 | 1.32 |
| 1200 | 2.72 | 34.39 | | 27.45 | 64 | | | | | | |

POG

NP-52-I

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| **G 7** | HMCS SAULT STE. MARIE; March 7, 1952; 0600 GCT; 54°17'N, 139°39'W; sounding, missing; wind, 200°, force 4; weather, clear; sea, slight. | | | | | | | | | | |
| 5 | 4.91 | 32.57 | | 25.78 | 222 | 0 | (4.91) | (32.57) | (25.78) | (222) | (0.00) |
| 20 | 4.86 | 32.60 | | 25.81 | 220 | 10 | 4.89 | 32.58 | 25.79 | 222 | 0.02 |
| 60 | 4.87 | 32.64 | | 25.84 | 217 | 20 | 4.86 | 32.60 | 25.81 | 220 | 0.04 |
| 80 | 4.9 | 33.03 | | 26.15 | 187 | 30 | 4.86 | 32.61 | 25.82 | 219 | 0.07 |
| 100 | 5.96 | 33.40 | | 26.32 | 171 | 50 | 4.86 | 32.63 | 25.84 | 217 | 0.11 |
| 110 | 6.02 | 33.62 | | 26.48 | 156 | 75 | 4.89 | 32.93 | 26.07 | 195 | 0.16 |
| 120 | 6.01 | 33.68 | | 26.53 | 151 | 100 | 5.96 | 33.40 | 26.32 | 171 | 0.21 |
| 130 | 6.00 | 33.74 | | 26.58 | 146 | 150 | 5.80 | 33.79 | 26.64 | 141 | 0.29 |
| 140 | 5.80 | 33.79 | | 26.64 | 141 | 200 | 5.20 | 33.79 | 26.72 | 133 | 0.36 |
| 160 | 5.79 | 33.79 | | 26.65 | 140 | 250 | 4.80 | 33.84 | 26.80 | 126 | 0.42 |
| 200 | 5.20 | 33.79 | | 26.72 | 133 | 300 | 4 48 | 33.89 | 26.88 | 118 | 0.48 |
| 300 | 4.48 | 33.89 | | 26.88 | 118 | 400 | 4.20 | 34.00 | 26.99 | 108 | 0.60 |
| 500 | 3.95 | 34.10 | | 27.10 | 97 | 500 | 3.95 | 34.10 | 27.10 | 97 | 0.71 |
| 800 | 3.42 | 34.29 | | 27.30 | 78 | 600 | 3.78 | 34.18 | 27.18 | 90 | 0.80 |
| 1000 | 3.04 | 34.34 | | 27.38 | 71 | 800 | 3.42 | 34.29 | 27.30 | 78 | 0.98 |
| | | | | | | 1000 | 3.04 | 34.34 | 27.38 | 71 | 1.14 |
| **E 1** | HMCS SAULT STE. MARIE; March 8, 1952; 0100 GCT; 56°52'N, 135°56'W; sounding, missing; wind, 230°, force 3; weather, clear; sea, slight. | | | | | | | | | | |
| 5 | 4.57 | 32.64 | | 25.88 | 213 | 0 | (4.57) | (32.64) | (25.88) | (213) | (0.00) |
| 20 | 4.51 | 32.62 | | 25.87 | 214 | 10 | 4.55 | 32.63 | 25.87 | 214 | 0.02 |
| 60 | 4.56 | 32.65 | | 25.88 | 213 | 20 | 4.51 | 32.62 | 25.87 | 214 | 0.04 |
| 80 | 4.58 | 32.65 | | 25.88 | 213 | 30 | 4.52 | 32.63 | 25.87 | 214 | 0.06 |
| 100 | 5.82 | 33.55 | | 26.45 | 159 | 50 | 4.55 | 32.65 | 25.89 | 212 | 0.11 |
| 110 | 5.87 | 33.62 | | 26.50 | 154 | 75 | 4.58 | 32.65 | 25.88 | 213 | 0.16 |
| 120 | 5.80 | 33.70 | | 26.57 | 148 | 100 | 5.82 | 33.55 | 26.45 | 159 | 0.21 |
| 130 | 5.72 | 33.76 | | 26.63 | 142 | 150 | 5.64 | 33.80 | 26.67 | 138 | 0.28 |
| 140 | 5.68 | 33.77 | | 26.64 | 141 | 200 | 5.37 | 33.86 | 26.75 | 130 | 0.35 |
| 160 | 5.59 | 33.82 | | 26.69 | 136 | 250 | 5.10 | 33.89 | 26.81 | 125 | 0.42 |
| 200 | 5.37 | 33.86 | | 26.75 | 130 | 300 | 4.86 | 33.93 | 26.87 | 119 | 0.48 |
| 300 | 4.86 | 33.93 | | 26.87 | 119 | 400 | 4.52 | 34.02 | 26.97 | 110 | 0.60 |
| 500 | 4.22 | 34.10 | | 27.07 | 100 | 500 | 4.22 | 34.10 | 27.07 | 100 | 0.70 |
| 800 | 3.50 | 34.29 | | 27.29 | 79 | 600 | 3.97 | 34.17 | 27.15 | 92 | 0.80 |
| 1000 | 3.06 | 34.37 | | 27.40 | 69 | 800 | 3.50 | 34.29 | 27.29 | 79 | 0.99 |
| | | | | | | 1000 | 3.06 | 34.37 | 27.40 | 69 | 1.15 |
| **E 2** | HMCS SAULT STE. MARIE; March 8, 1952; 0600 GCT; 52°34'N, 135°00'W; sounding, missing; wind, 200°, force 3; weather, overcast; sea, slight. | | | | | | | | | | |
| 5 | 5.14 | 32.60 | | 25.78 | 222 | 0 | (5.14) | (32.60) | (25.78) | (222) | (0.00) |
| 20 | 5.08 | 32.60 | | 25.79 | 222 | 10 | 5.12 | 32.60 | 25.78 | 222 | 0.02 |
| 60 | 5.08 | 32.64 | | 25.82 | 219 | 20 | 5.08 | 32.60 | 25.79 | 222 | 0.04 |
| 80 | 4.73 | 32.69 | | 25.90 | 211 | 30 | 5.08 | 32.60 | 25.79 | 222 | 0.07 |
| 100 | 4.72 | 32.74 | | 25.94 | 207 | 50 | 5.08 | 32.62 | 25.80 | 221 | 0.11 |
| 110 | 4.84 | 32.79 | | 25.97 | 204 | 75 | 4.79 | 32.68 | 25.88 | 213 | 0.16 |
| 120 | 5.37 | 33.14 | | 26.18 | 184 | 100 | 4.72 | 32.74 | 25.94 | 207 | 0.22 |
| 130 | 5.54 | 33.31 | | 26.30 | 173 | 150 | 5.54 | 33.67 | 26.58 | 146 | 0.31 |
| 140 | 5.46 | 33.60 | | 26.54 | 150 | 200 | 5.07 | 33.77 | 26.72 | 133 | 0.38 |
| 160 | 5.57 | 33.72 | | 26.62 | 143 | 250 | 4.76 | 33.80 | 26.77 | 128 | 0.44 |
| 200 | 5.07 | 33.77 | | 26.72 | 133 | 300 | 4.49 | 33.84 | 26.84 | 122 | 0.51 |
| 300 | 4.49 | 33.84 | | 26.84 | 122 | 400 | 4.17 | 34.00 | 27.00 | 107 | 0.63 |
| 500 | 3.89 | 34.12 | | 27.12 | 95 | 500 | 3.89 | 34.12 | 27.12 | 95 | 0.73 |
| 800 | 3.34 | 34.27 | | 27.29 | 79 | 600 | 3.69 | 34.18 | 27.19 | 89 | 0.83 |
| 1000 | 3.08 | 34.34 | | 27.37 | 72 | 800 | 3.34 | 34.27 | 27.29 | 79 | 1.01 |
| | | | | | | 1000 | 3.08 | 34.34 | 27.37 | 72 | 1.17 |

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

E4 HMCS SAULT STE. MARIE; March 8, 1952; 1200 GCT; 52°09'N, 133°51'W; sounding, missing; wind, 200°, force 2; weather, drizzle and fog; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 6.06 | 32.45 | 25.56 | 243 | 0 | (6.06) | (32.45) | (25.56) | (243) | (0.00) |
| 20 | 5.88 | 32.50 | 25.62 | 238 | 10 | 6.00 | 32.47 | 25.58 | 242 | 0.02 |
| 60 | 5.56 | 32.55 | 25.69 | 231 | 20 | 5.88 | 32.50 | 25.62 | 238 | 0.05 |
| 80 | 5.64 | 32.60 | 25.72 | 228 | 30 | 5.74 | 32.51 | 25.64 | 236 | 0.07 |
| 100 | 6.38 | 33.15 | 26.07 | 195 | 50 | 5.58 | 32.53 | 25.68 | 232 | 0.12 |
| 110 | 6.36 | 33.43 | 26.29 | 174 | 75 | 5.56 | 32.59 | 25.73 | 227 | 0.18 |
| 120 | 6.35 | 33.53 | 26.37 | 166 | 100 | 6.38 | 33.15 | 26.07 | 195 | 0.23 |
| 130 | 6.42 | 33.60 | 26.42 | 162 | 150 | 6.36 | 33.73 | 26.53 | 151 | 0.32 |
| 140 | 6.48 | 33.65 | 26.45 | 159 | 200 | 5.82 | 33.88 | 26.71 | 134 | 0.39 |
| 160 | 6.25 | 33.79 | 26.59 | 146 | 250 | 5.42 | 33.91 | 26.78 | 128 | 0.46 |
| 200 | 5.82 | 33.88 | 26.71 | 134 | 300 | 5.09 | 33.94 | 26.85 | 121 | 0.52 |
| 300 | 5.09 | 33.94 | 26.85 | 121 | 400 | 4.77 | 34.04 | 26.96 | 110 | 0.64 |
| 500 | 4.47 | 34.13 | 27.07 | 100 | 500 | 4.47 | 34.13 | 27.07 | 100 | 0.75 |
| 800 | 3.68 | 34.31 | 27.29 | 79 | 600 | 4.19 | 34.20 | 27.15 | 92 | 0.85 |
| 1000 | 3.22 | 34.37 | 27.38 | 71 | 800 | 3.68 | 34.31 | 27.29 | 79 | 1.03 |
| | | | | | 1000 | 3.22 | 34.37 | 27.38 | 71 | 1.20 |

E6 HMCS SAULT STE. MARIE; March 8, 1952; 1800 GCT; 51°42'N, 132°29'W; sounding, missing; wind, missing; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 6.96 | 32.33 | 25.35 | 263 | 0 | (6.96) | (32.33) | (25.35) | (263) | (0.00) |
| 20 | 6.90 | 32.33 | 25.35 | 263 | 10 | 6.94 | 32.33 | 25.35 | 263 | 0.03 |
| 60 | 6.94 | 32.46 | 25.45 | 254 | 20 | 6.90 | 32.33 | 25.35 | 263 | 0.05 |
| 80 | 6.96 | 32.52 | 25.50 | 249 | 30 | 6.91 | 32.36 | 25.38 | 260 | 0.08 |
| 100 | 6.90 | 32.71 | 25.65 | 235 | 50 | 6.93 | 32.43 | 25.43 | 256 | 0.13 |
| 110 | 6.86 | 32.76 | 25.70 | 230 | 75 | 6.96 | 32.49 | 25.47 | 252 | 0.19 |
| 120 | 6.81 | 32.83 | 25.76 | 224 | 100 | 6.90 | 32.71 | 25.65 | 235 | 0.26 |
| 130 | 6.80 | 32.93 | 25.84 | 217 | 150 | 6.95 | 33.36 | 26.16 | 186 | 0.36 |
| 140 | 6.95 | 33.20 | 26.03 | 199 | 200 | 6.54 | 33.67 | 26.46 | 158 | 0.45 |
| 160 | 6.94 | 33.48 | 26.25 | 178 | 250 | 6.17 | 33.79 | 26.60 | 145 | 0.53 |
| 200 | 6.54 | 33.67 | 26.46 | 158 | 300 | 5.82 | 33.89 | 26.72 | 133 | 0.60 |
| 300 | 5.82 | 33.89 | 26.72 | 133 | 400 | 5.21 | 33.95 | 26.84 | 122 | 0.73 |
| 500 | 4.69 | 34.01 | 26.95 | 111 | 500 | 4.69 | 34.01 | 26.95 | 111 | 0.85 |
| 800 | 3.62 | 34.23 | 27.23 | 85 | 600 | 4.29 | 34.09 | 27.05 | 102 | 0.96 |
| 1000 | 3.13 | 34.34 | 27.37 | 72 | 800 | 3.62 | 34.23 | 27.23 | 85 | 1.16 |
| | | | | | 1000 | 3.13 | 34.34 | 27.37 | 72 | 1.33 |

E8 HMCS SAULT STE. MARIE; March 9, 1952; 0000 GCT; 51°16'N, 131°14'W; sounding, missing; wind, 240°, force 3; weather, overcast; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 6.88 | 32.41 | 25.42 | 257 | 0 | (6.88) | (32.41) | (25.42) | (257) | (0.00) |
| 20 | 6.76 | 32.41 | 25.44 | 255 | 10 | 6.84 | 32.41 | 25.42 | 257 | 0.03 |
| 60 | 6.35 | 32.58 | 25.62 | 238 | 20 | 6.76 | 32.41 | 25.44 | 255 | 0.05 |
| 80 | 6.39 | 32.60 | 25.63 | 237 | 30 | 6.60 | 32.47 | 25.50 | 249 | 0.08 |
| 100 | 6.32 | 33.08 | 26.02 | 200 | 50 | 6.39 | 32.55 | 25.59 | 240 | 0.12 |
| 110 | 6.24 | 33.31 | 26.21 | 182 | 75 | 6.39 | 32.60 | 25.63 | 237 | 0.18 |
| 120 | 6.13 | 33.48 | 26.36 | 167 | 100 | 6.32 | 33.08 | 26.02 | 200 | 0.24 |
| 140 | 6.42 | 33.72 | 26.51 | 153 | 150 | 6.55 | 33.77 | 26.53 | 151 | 0.33 |
| 160 | 6.62 | 33.81 | 26.55 | 149 | 200 | 6.35 | 33.91 | 26.67 | 138 | 0.40 |
| 200 | 6.35 | 33.91 | 26.67 | 138 | 250 | 5.81 | 33.92 | 26.75 | 130 | 0.47 |
| 300 | 5.36 | 33.94 | 26.82 | 124 | 300 | 5.36 | 33.94 | 26.82 | 124 | 0.54 |
| 500 | 4.40 | 34.08 | 27.04 | 103 | 400 | 4.84 | 34.01 | 26.93 | 113 | 0.66 |
| 800 | 3.55 | 34.31 | 27.30 | 78 | 500 | 4.40 | 34.08 | 27.04 | 103 | 0.77 |
| 1000 | 3.16 | 34.37 | 27.39 | 70 | 600 | 4.08 | 34.18 | 27.15 | 92 | 0.87 |
| | | | | | 800 | 3.55 | 34.31 | 27.30 | 78 | 1.06 |
| | | | | | 1000 | 3.16 | 34.37 | 27.39 | 70 | 1.22 |

POG

NP-52-1

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| **E10** | HMCS SAULT STE. MARIE; March 9, 1952; 0600 GCT; 50°51'N, 129°48'W; sounding, missing; wind, 240°, force 3; weather, fog; sea, slight. | | | | | | | | | | |
| 5 | 6.62 | 32.48 | | 25.51 | 248 | 0 | (6.62) | (32.48) | (25.51) | (248) | (0.00) |
| 20 | 6.48 | 32.50 | | 25.54 | 245 | 10 | 6.57 | 32.49 | 25.52 | 247 | 0.02 |
| 60 | 6.44 | 32.58 | | 25.61 | 239 | 20 | 6.48 | 32.50 | 25.54 | 245 | 0.05 |
| 80 | 6.52 | 32.76 | | 25.74 | 226 | 30 | 6.45 | 32.52 | 25.56 | 243 | 0.07 |
| 100 | 6.55 | 33.12 | | 26.02 | 200 | 50 | 6.45 | 32.53 | 25.57 | 242 | 0.12 |
| 110 | 6.52 | 33.27 | | 26.14 | 188 | 75 | 6.50 | 32.70 | 25.70 | 230 | 0.18 |
| 120 | 6.66 | 33.43 | | 26.25 | 178 | 100 | 6.55 | 33.12 | 26.02 | 200 | 0.24 |
| 140 | 6.96 | 33.67 | | 26.40 | 164 | 150 | 6.92 | 33.75 | 26.47 | 157 | 0.33 |
| 160 | 6.86 | 33.81 | | 26.52 | 152 | 200 | 6.32 | 33.86 | 26.63 | 142 | 0.40 |
| 200 | 6.32 | 33.86 | | 26.63 | 142 | 250 | 6.12 | 33.94 | 26.72 | 133 | 0.47 |
| 300 | 5.90 | 34.00 | | 26.80 | 126 | 300 | 5.90 | 34.00 | 26.80 | 126 | 0.54 |
| 500 | 4.74 | 34.10 | | 27.01 | 106 | 400 | 5.28 | 34.05 | 26.91 | 115 | 0.66 |
| 800 | 3.63 | 34.29 | | 27.28 | 80 | 500 | 4.74 | 34.10 | 27.01 | 106 | 0.78 |
| 1000 | 3.12 | 34.38 | | 27.40 | 69 | 600 | 4.29 | 34.16 | 27.11 | 96 | 0.88 |
| | | | | | | 800 | 3.63 | 34.29 | 27.28 | 80 | 1.07 |
| | | | | | | 1000 | 3.31 | 34.44 | 27.43 | 69 | 1.23 |
| **E12** | HMCS SAULT STE. MARIE; March 9, 1952; 1100 GCT; 50°24'N, 128°28'W; sounding, missing; wind, 240°, force 2; weather, drizzle; sea, smooth. | | | | | | | | | | |
| 5 | 7.64 | 30.84 | | 24.09 | 383 | 0 | (7.64) | (30.84) | (24.09) | (383) | (0.00) |
| 20 | 7.68 | 31.62 | | 24.69 | 326 | 10 | 7.66 | 31.14 | 24.32 | 361 | 0.04 |
| 40 | 7.65 | 32.07 | | 25.05 | 292 | 20 | 7.68 | 31.62 | 24.69 | 326 | 0.07 |
| 60 | 7.65 | 32.19 | | 25.14 | 283 | 30 | 7.66 | 31.89 | 24.91 | 305 | 0.10 |
| 80 | 7.08 | 32.45 | | 25.42 | 257 | 50 | 7.65 | 32.11 | 25.08 | 289 | 0.16 |
| 100 | 7.08 | 32.45 | | 25.42 | 257 | 75 | 7.17 | 32.41 | 25.38 | 260 | 0.23 |
| 110 | 6.96 | 32.50 | | 25.48 | 251 | 100 | 7.08 | 32.45 | 25.42 | 257 | 0.30 |
| 120 | 6.93 | 32.52 | | 25.50 | 249 | 150 | 7.05 | 33.40 | 26.17 | 185 | 0.41 |
| 140 | 6.97 | 32.91 | | 25.80 | 221 | | | | | | |
| 160 | 7.07 | 33.72 | | 26.42 | 162 | | | | | | |
| 180 | 6.96 | 33.82 | | 26.52 | 152 | | | | | | |
| **C1** | HMCS SAULT STE. MARIE; March 12, 1952; 1800 GCT; 50°25'N, 128°31'W; sounding, 549 m; wind, 240°, force 1; weather, cloudy; sea, slight. | | | | | | | | | | |
| 5 | 7.48 | 31.21 | 6.29 | 24.40 | 354 | 0 | (7.48) | (31.21) | (24.40) | (354) | (0.00) |
| 20 | 7.46 | 31.22 | 5.73 | 24.41 | 353 | 10 | 7.47 | 31.21 | 24.40 | 354 | 0.04 |
| 60 | 7.44 | 32.33 | 6.09 | 25.28 | 270 | 20 | 7.46 | 31.22 | 24.41 | 353 | 0.07 |
| 80 | 6.45 | 32.53 | 6.15 | 25.57 | 242 | 30 | 7.46 | 31.59 | 24.70 | 325 | 0.10 |
| 100 | 6.49 | 32.55 | 6.26 | 25.58 | 242 | 50 | 7.45 | 32.14 | 25.13 | 284 | 0.17 |
| 110 | 6.92 | 33.02 | 4.88 | 25.89 | 212 | 75 | 6.60 | 32.50 | 25.53 | 246 | 0.23 |
| 120 | 6.75 | 33.05 | 4.78 | 25.94 | 207 | 100 | 6.49 | 32.55 | 25.58 | 242 | 0.29 |
| 130 | 7.40 | 33.38 | - | 26.11 | 191 | 150 | 7.39 | 33.58 | 26.27 | 176 | 0.40 |
| 140 | 7.53 | 33.46 | - | 26.15 | 187 | 200 | 6.46 | 33.84 | 26.60 | 145 | 0.48 |
| 160 | 7.27 | 33.67 | 2.95 | 26.36 | 167 | 250 | 5.97 | 33.87 | 26.69 | 136 | 0.55 |
| 180 | 7.10 | 33.74 | 2.76 | 26.43 | 161 | 300 | 5.56 | 33.91 | 26.77 | 128 | 0.62 |
| 200 | 6.46 | 33.84 | 2.39 | 26.60 | 145 | 400 | 5.00 | 33.98 | 26.89 | 117 | 0.75 |
| 300 | 5.56 | 33.91 | 1.64 | 26.77 | 128 | 500 | 4.79 | 34.06 | 26.98 | 109 | 0.86 |
| 500 | 4.79 | 34.06 | 0.81 | 26.98 | 109 | | | | | | |

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

HMCS SAULT STE. MARIE; March 13, 1952; 0000 GCT; 50°25'N, 130°33'W; sounding, missing; wind, 300°, force 5; weather, cloudy; sea, slight. C3

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 7.36 | 31.59 | 6.45 | 24.71 | 324 | 0 | (7.36) | (31.59) | (24.71) | (324) | (0.00) |
| 20 | 6.70 | 32.40 | 6.37 | 25.44 | 255 | 10 | 7.10 | 31.90 | 24.99 | 298 | 0.03 |
| 60 | 6.50 | 32.60 | - | 25.62 | 238 | 20 | 6.70 | 32.40 | 25.44 | 255 | 0.06 |
| 100 | 6.39 | 32.91 | - | 25.88 | 213 | 30 | 6.64 | 32.44 | 25.47 | 252 | 0.08 |
| 110 | 6.26 | 33.12 | - | 26.06 | 196 | 50 | 6.54 | 32.54 | 25.57 | 242 | 0.13 |
| 120 | 6.16 | 33.40 | - | 26.29 | 174 | 75 | 6.46 | 32.62 | 25.64 | 236 | 0.19 |
| 130 | 6.07 | 33.57 | - | 26.44 | 160 | 100 | 6.39 | 32.91 | 25.88 | 213 | 0.25 |
| 140 | 6.04 | 33.64 | - | 26.50 | 154 | 150 | 6.16 | 33.67 | 26.50 | 154 | 0.34 |
| 160 | 6.22 | 33.70 | - | 26.52 | 152 | 200 | 5.96 | 33.81 | 26.64 | 141 | 0.42 |
| 200 | 5.96 | 33.81 | - | 26.64 | 141 | 250 | 5.44 | 33.85 | 26.74 | 131 | 0.49 |
| 300 | 5.03 | 33.89 | - | 26.81 | 125 | 300 | 5.03 | 33.89 | 26.81 | 125 | 0.55 |
| 500 | 4.44 | 34.05 | - | 27.01 | 106 | 400 | 4.73 | 33.97 | 26.91 | 115 | 0.68 |
| 800 | 3.70 | 34.29 | - | 27.27 | 81 | 500 | 4.44 | 34.05 | 27.01 | 106 | 0.79 |
| 1000 | 3.32 | 34.36 | - | 27.37 | 72 | 600 | 4.17 | 34.15 | 27.11 | 96 | 0.90 |
| | | | | | | 800 | 3.70 | 34.29 | 27.27 | 81 | 1.08 |
| | | | | | | 1000 | 3.32 | 34.36 | 27.37 | 72 | 1.25 |

HMCS SAULT STE. MARIE; March 13, 1952; 0600 GCT; 50°25'N, 131°02'W; sounding, missing; wind, 300°, force 2; weather, overcast; sea, moderate. C5

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 6.22 | 32.58 | 6.38 | 25.64 | 236 | 0 | (6.22) | (32.58) | (25.64) | (236) | (0.00) |
| 20 | 6.18 | 32.58 | - | 25.64 | 236 | 10 | 6.20 | 32.58 | 25.64 | 236 | 0.02 |
| 60 | 6.18 | 32.60 | - | 25.66 | 234 | 20 | 6.18 | 32.58 | 25.64 | 236 | 0.05 |
| 80 | 6.52 | 32.95 | - | 25.89 | 212 | 30 | 6.18 | 32.59 | 25.65 | 235 | 0.07 |
| 100 | 6.46 | 33.48 | - | 26.32 | 171 | 50 | 6.18 | 32.60 | 25.66 | 234 | 0.12 |
| 110 | 6.25 | 33.62 | - | 26.45 | 159 | 75 | 6.47 | 32.85 | 25.82 | 219 | 0.17 |
| 120 | 5.99 | 33.65 | - | 26.51 | 153 | 100 | 6.46 | 33.48 | 26.32 | 171 | 0.22 |
| 130 | 6.08 | 33.76 | - | 26.59 | 146 | 150 | 5.91 | 33.79 | 26.63 | 142 | 0.30 |
| 140 | 6.06 | 33.77 | - | 26.60 | 145 | 200 | 5.64 | 33.84 | 26.70 | 135 | 0.37 |
| 160 | 5.80 | 33.81 | - | 26.66 | 139 | 250 | 5.31 | 33.89 | 26.78 | 128 | 0.44 |
| 200 | 5.64 | 33.84 | - | 26.70 | 135 | 300 | 5.02 | 33.93 | 26.85 | 121 | 0.50 |
| 300 | 5.02 | 33.93 | - | 26.85 | 121 | 400 | 4.61 | 33.99 | 26.94 | 112 | 0.62 |
| 500 | 4.28 | 34.05 | - | 27.02 | 105 | 500 | 4.28 | 34.05 | 27.02 | 105 | 0.74 |
| 800 | 3.76 | 34.24 | - | 27.23 | 85 | 600 | 4.12 | 34.12 | 27.10 | 97 | 0.84 |
| 1000 | 3.34 | 34.32 | - | 27.33 | 75 | 800 | 3.76 | 34.24 | 27.23 | 85 | 1.04 |
| | | | | | | 1000 | 3.34 | 34.32 | 27.33 | 75 | 1.21 |

HMCS SAULT STE. MARIE; March 13, 1952; 1800 GCT; 50°26'N, 132°38'W; sounding, missing; wind, 210°, force 5; weather, clear; sea, slight. C8

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 6.02 | 32.62 | 6.40 | 25.69 | 231 | 0 | (6.02) | (32.62) | (25.69) | (231) | (0.00) |
| 20 | 5.98 | 32.58 | 6.07 | 25.67 | 233 | 10 | 6.00 | 32.60 | 25.68 | 232 | 0.02 |
| 60 | 6.02 | 32.64 | 6.07 | 25.71 | 229 | 20 | 5.98 | 32.58 | 25.67 | 233 | 0.05 |
| 80 | 6.04 | 32.64 | 6.40 | 25.71 | 229 | 30 | 5.99 | 32.60 | 25.68 | 232 | 0.07 |
| 100 | 6.22 | 33.14 | 5.07 | 26.08 | 194 | 50 | 6.01 | 32.63 | 25.70 | 230 | 0.12 |
| 110 | 6.11 | 33.22 | 4.84 | 26.16 | 186 | 75 | 6.02 | 32.64 | 25.71 | 229 | 0.17 |
| 120 | 5.92 | 33.41 | - | 26.33 | 170 | 100 | 6.22 | 33.14 | 26.08 | 194 | 0.23 |
| 130 | 5.86 | 33.55 | - | 26.45 | 159 | 150 | 5.69 | 33.63 | 26.53 | 151 | 0.31 |
| 140 | 5.74 | 33.62 | - | 26.52 | 152 | 200 | 5.32 | 33.76 | 26.68 | 137 | 0.39 |
| 160 | 5.64 | 33.65 | 3.96 | 26.55 | 149 | 250 | 4.99 | 33.83 | 26.77 | 128 | 0.45 |
| 200 | 5.32 | 33.76 | 3.49 | 26.68 | 137 | 300 | 4.71 | 33.89 | 26.85 | 121 | 0.52 |
| 300 | 4.71 | 33.89 | 2.00 | 26.85 | 121 | 400 | 4.37 | 34.00 | 26.97 | 110 | 0.64 |
| 500 | 4.07 | 34.10 | 0.85 | 27.09 | 98 | 500 | 4.07 | 34.10 | 27.09 | 98 | 0.74 |
| 800 | 3.40 | 34.27 | 0.45 | 27.29 | 79 | 600 | 3.82 | 34.17 | 27.17 | 91 | 0.84 |
| 1000 | 3.08 | 34.34 | 0.36 | 27.37 | 72 | 800 | 3.40 | 34.27 | 27.29 | 79 | 1.02 |
| | | | | | | 1000 | 3.08 | 34.34 | 27.37 | 72 | 1.19 |

POG

NP-52-1

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| C10 | HMCS SAULT STE. MARIE; March 14, 1952; 0000 GCT; 50°18'N, 133°45'W; sounding, missing; wind, 240°, force 4; weather, cloudy; sea, moderate. | | | | | | | | | | |
| 5 | 6.06 | 32.62 | 6.54 | 25.69 | 231 | 0 | (6.06) | (32.62) | (25.69) | (231) | (0.00) |
| 20 | 6.00 | 32.62 | 6.41 | 25.70 | 230 | 10 | 6.04 | 32.62 | 25.69 | 231 | 0.02 |
| 60 | 6.00 | 32.62 | 6.40 | 25.70 | 230 | 20 | 6.00 | 32.62 | 25.70 | 230 | 0.05 |
| 80 | 6.02 | 32.62 | 6.37 | 25.69 | 231 | 30 | 6.00 | 32.62 | 25.70 | 230 | 0.07 |
| 100 | 6.11 | 32.98 | 5.41 | 25.97 | 204 | 50 | 6.00 | 32.62 | 25.70 | 230 | 0.12 |
| 110 | 6.07 | 33.17 | 4.94 | 26.12 | 190 | 75 | 6.01 | 32.62 | 25.70 | 230 | 0.17 |
| 120 | 5.88 | 33.43 | - | 26.35 | 168 | 100 | 6.11 | 32.98 | 25.97 | 204 | 0.23 |
| 130 | 5.76 | 33.53 | - | 26.44 | 160 | 150 | 5.56 | 33.70 | 26.60 | 145 | 0.32 |
| 140 | 5.64 | 33.62 | - | 26.53 | 151 | 200 | 5.09 | 33.82 | 26.75 | 130 | 0.38 |
| 160 | 5.48 | 33.76 | 3.72 | 26.66 | 139 | 250 | 4.81 | 33.85 | 26.81 | 125 | 0.45 |
| 200 | 5.09 | 33.82 | 3.21 | 26.75 | 130 | 300 | 4.56 | 33.88 | 26.86 | 120 | 0.51 |
| 300 | 4.56 | 33.88 | 1.81 | 26.86 | 120 | 400 | 4.23 | 33.97 | 26.97 | 110 | 0.63 |
| 500 | 3.94 | 34.06 | 0.59 | 27.07 | 100 | 500 | 3.94 | 34.06 | 27.07 | 100 | 0.74 |
| 800 | 3.35 | 34.29 | 0.45 | 27.31 | 77 | 600 | 3.73 | 34.15 | 27.16 | 92 | 0.84 |
| 1000 | 3.02 | 34.36 | 0.33 | 27.39 | 70 | 800 | 3.35 | 34.29 | 27.31 | 77 | 1.02 |
| | | | | | | 1000 | 3.02 | 34.36 | 27.39 | 70 | 1.18 |
| C12 | HMCS SAULT STE. MARIE; March 14, 1952; 0600 GCT; 49°57'N, 134°51'W; sounding, missing; wind, 240°, force 2; weather, cloudy; sea, slight. | | | | | | | | | | |
| 5 | 5.86 | 32.62 | 6.38 | 25.71 | 229 | 0 | (5.86) | (32.62) | (25.71) | (229) | (0.00) |
| 20 | 5.84 | 32.60 | 6.45 | 25.70 | 230 | 10 | 5.85 | 32.61 | 25.71 | 229 | 0.02 |
| 60 | 5.85 | 32.62 | 5.78 | 25.72 | 228 | 20 | 5.84 | 32.60 | 25.70 | 230 | 0.05 |
| 80 | 5.84 | 32.62 | 6.43 | 25.72 | 228 | 30 | 5.85 | 32.61 | 25.71 | 229 | 0.07 |
| 100 | 5.79 | 33.22 | 4.52 | 26.20 | 183 | 50 | 5.85 | 32.62 | 25.72 | 228 | 0.12 |
| 110 | 5.68 | 33.57 | 3.65 | 26.49 | 155 | 75 | 5.85 | 32.62 | 25.72 | 228 | 0.17 |
| 120 | 5.56 | 33.64 | - | 26.55 | 149 | 100 | 5.79 | 33.22 | 26.20 | 183 | 0.22 |
| 130 | 5.49 | 33.69 | - | 26.60 | 145 | 150 | 5.42 | 33.77 | 26.67 | 138 | 0.30 |
| 140 | 5.45 | 33.74 | - | 26.65 | 140 | 200 | 5.12 | 33.86 | 26.78 | 128 | 0.37 |
| 160 | 5.38 | 33.79 | 2.78 | 26.69 | 136 | 250 | 4.82 | 33.90 | 26.85 | 121 | 0.44 |
| 200 | 5.12 | 33.86 | 2.32 | 26.78 | 128 | 300 | 4.58 | 33.94 | 26.90 | 116 | 0.50 |
| 300 | 4.58 | 33.94 | 1.42 | 26.90 | 116 | 400 | 4.35 | 34.04 | 27.01 | 106 | 0.61 |
| 500 | 4.13 | 34.13 | 0.55 | 27.10 | 97 | 500 | 4.13 | 34.13 | 27.10 | 97 | 0.72 |
| 800 | 3.53 | 34.31 | 0.40 | 27.31 | 77 | 600 | 3.95 | 34.20 | 27.18 | 90 | 0.81 |
| 1000 | 3.05 | 34.36 | 0.38 | 27.39 | 70 | 800 | 3.53 | 34.31 | 27.31 | 77 | 0.99 |
| | | | | | | 1000 | 3.05 | 34.36 | 27.39 | 70 | 1.15 |
| C14 | HMCS SAULT STE. MARIE; March 14, 1952; 1200 GCT; 49°39'N, 135°55'W; sounding, missing; wind, 280°, force 4; weather, clear; sea, moderate. | | | | | | | | | | |
| 5 | 5.65 | 32.62 | | 25.74 | 226 | 0 | (5.65) | (32.62) | (25.74) | (226) | (0.00) |
| 20 | 5.60 | 32.62 | | 25.74 | 226 | 10 | 5.63 | 32.62 | 25.74 | 226 | 0.02 |
| 60 | 5.65 | 32.62 | | 25.74 | 226 | 20 | 5.60 | 32.62 | 25.74 | 226 | 0.04 |
| 80 | 5.64 | 32.62 | | 25.74 | 226 | 30 | 5.62 | 32.62 | 25.74 | 226 | 0.07 |
| 100 | 5.71 | 32.65 | | 25.76 | 224 | 50 | 5.65 | 32.62 | 25.74 | 226 | 0.11 |
| 110 | 5.81 | 33.15 | | 26.14 | 188 | 75 | 5.64 | 32.62 | 25.74 | 226 | 0.17 |
| 120 | 5.78 | 33.67 | | 26.55 | 149 | 100 | 5.71 | 32.65 | 25.76 | 224 | 0.23 |
| 130 | 5.82 | 33.72 | | 26.59 | 146 | 150 | 5.69 | 33.74 | 26.62 | 143 | 0.32 |
| 140 | 5.77 | 33.70 | | 26.58 | 146 | 200 | 5.25 | 33.77 | 26.69 | 136 | 0.39 |
| 160 | 5.60 | 33.77 | | 26.65 | 140 | 250 | 4.80 | 33.82 | 26.79 | 127 | 0.46 |
| 200 | 5.25 | 33.77 | | 26.69 | 136 | 300 | 4.44 | 33.86 | 26.86 | 120 | 0.52 |
| 300 | 4.44 | 33.86 | | 26.86 | 120 | 400 | 4.18 | 33.95 | 26.96 | 110 | 0.64 |
| 500 | 3.95 | 34.03 | | 27.04 | 103 | 500 | 3.95 | 34.03 | 27.04 | 103 | 0.75 |
| 800 | 3.37 | 34.25 | | 27.27 | 81 | 600 | 3.75 | 34.11 | 27.13 | 94 | 0.85 |
| 1000 | 3.02 | 34.34 | | 27.38 | 71 | 800 | 3.37 | 34.25 | 27.27 | 81 | 1.04 |
| | | | | | | 1000 | 3.02 | 34.34 | 27.38 | 71 | 1.20 |

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

HMCS SAULT STE. MARIE; March 14, 1952; 1800 GCT; 49°19'N, 137°01'W; sounding, missing; wind, 280°, force 2; weather, clear; sea, moderate. C16

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 5.32 | 32.67 | 6.45 | 25.82 | 219 | 0 | (5.32) | (32.67) | (25.82) | (219) | (0.00) |
| 20 | 5.29 | 32.64 | 6.45 | 25.80 | 221 | 10 | 5.31 | 32.66 | 25.81 | 220 | 0.02 |
| 60 | 5.33 | 32.64 | 6.41 | 25.79 | 222 | 20 | 5.29 | 32.64 | 25.80 | 221 | 0.04 |
| 80 | 5.34 | 32.65 | 6.50 | 25.80 | 221 | 30 | 5.30 | 32.64 | 25.80 | 221 | 0.07 |
| 100 | 5.35 | 32.64 | 6.52 | 25.79 | 222 | 50 | 5.32 | 32.64 | 25.79 | 222 | 0.11 |
| 110 | 5.32 | 32.72 | 6.29 | 25.86 | 215 | 75 | 5.34 | 32.65 | 25.80 | 221 | 0.17 |
| 120 | 5.41 | 33.41 | - | 26.39 | 164 | 100 | 5.35 | 32.64 | 25.79 | 222 | 0.22 |
| 130 | 5.55 | 33.65 | - | 26.56 | 148 | 150 | 5.38 | 33.75 | 26.66 | 139 | 0.31 |
| 140 | 5.46 | 33.74 | - | 26.65 | 140 | 200 | 5.00 | 33.81 | 26.75 | 130 | 0.38 |
| 160 | 5.30 | 33.76 | 3.54 | 26.68 | 137 | 250 | 4.62 | 33.83 | 26.81 | 125 | 0.44 |
| 200 | 5.00 | 33.81 | 2.98 | 26.75 | 130 | 300 | 4.33 | 33.86 | 26.87 | 119 | 0.51 |
| 300 | 4.33 | 33.86 | 1.86 | 26.87 | 119 | 400 | 4.17 | 34.00 | 27.00 | 107 | 0.62 |
| 500 | 3.98 | 34.12 | 0.77 | 27.11 | 96 | 500 | 3.98 | 34.12 | 27.11 | 96 | 0.73 |
| 800 | 3.22 | 34.31 | 0.45 | 27.34 | 74 | 600 | 3.69 | 34.20 | 27.20 | 88 | 0.82 |
| 1000 | 2.89 | 34.37 | 0.45 | 27.41 | 68 | 800 | 3.22 | 34.31 | 27.34 | 74 | 1.00 |
| | | | | | | 1000 | 2.89 | 34.37 | 27.41 | 68 | 1.15 |

HMCS SAULT STE. MARIE; March 15, 1952; 0000 GCT; 49°04'N, 135°47'W; sounding, missing; wind, 020°, force 6; weather, clear; sea, moderate. A2

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 5.76 | 32.67 | 6.38 | 25.77 | 223 | 0 | (5.76) | (32.67) | (25.77) | (223) | (0.00) |
| 20 | 5.68 | 32.67 | 5.73 | 25.77 | 223 | 10 | 5.73 | 32.67 | 25.77 | 223 | 0.02 |
| 60 | 5.71 | 32.65 | 6.36 | 25.76 | 224 | 20 | 5.68 | 32.67 | 25.77 | 223 | 0.04 |
| 80 | 5.70 | 32.67 | 6.44 | 25.77 | 223 | 30 | 5.69 | 32.66 | 25.77 | 223 | 0.07 |
| 100 | 5.73 | 32.67 | 6.38 | 25.77 | 223 | 50 | 5.71 | 32.65 | 25.76 | 224 | 0.11 |
| 110 | 5.75 | 32.83 | 5.94 | 25.89 | 212 | 75 | 5.70 | 32.67 | 25.77 | 223 | 0.17 |
| 120 | 5.91 | 33.19 | - | 26.16 | 186 | 100 | 5.73 | 32.67 | 25.77 | 223 | 0.22 |
| 130 | 6.00 | 33.62 | - | 26.49 | 155 | 150 | 5.88 | 33.79 | 26.63 | 142 | 0.32 |
| 140 | 5.92 | 33.74 | - | 26.59 | 146 | 200 | 5.16 | 33.82 | 26.74 | 131 | 0.38 |
| 160 | 5.80 | 33.82 | 3.69 | 26.67 | 138 | 250 | 5.13 | 33.92 | 26.83 | 123 | 0.45 |
| 200 | 5.16 | 33.82 | 3.47 | 26.74 | 131 | 300 | 5.06 | 34.01 | 26.91 | 115 | 0.51 |
| 300 | 5.06 | 34.01 | 1.30 | 26.91 | 115 | 400 | 4.79 | 34.10 | 27.01 | 106 | 0.63 |
| 500 | 4.48 | 34.17 | 0.56 | 27.10 | 97 | 500 | 4.48 | 34.17 | 27.10 | 97 | 0.73 |
| 800 | 3.32 | 34.31 | 0.41 | 27.33 | 75 | 600 | 4.02 | 34.22 | 27.19 | 89 | 0.83 |
| 1000 | 2.90 | 34.37 | 0.38 | 27.41 | 68 | 800 | 3.32 | 34.31 | 27.33 | 75 | 1.01 |
| | | | | | | 1000 | 2.90 | 34.37 | 27.41 | 68 | 1.16 |

HMCS SAULT STE. MARIE; March 15, 1952; 0600 GCT; 48°45'N, 134°34'W; sounding, missing; wind, 300°, force 6; weather, clear; sea, rough. A4

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 5.84 | 32.64 | | 25.73 | 227 | 0 | (5.84) | (32.64) | (25.73) | (227) | (0.00) |
| 20 | 5.81 | 32.62 | | 25.72 | 228 | 10 | 5.83 | 32.63 | 25.73 | 227 | 0.02 |
| 60 | 5.82 | 32.62 | | 25.72 | 228 | 20 | 5.81 | 32.62 | 25.72 | 228 | 0.05 |
| 80 | 5.78 | 32.64 | | 25.74 | 226 | 30 | 5.82 | 32.62 | 25.72 | 228 | 0.07 |
| 100 | 5.93 | 33.00 | | 26.00 | 202 | 50 | 5.82 | 32.62 | 25.72 | 228 | 0.11 |
| 110 | 6.08 | 33.40 | | 26.30 | 173 | 75 | 5.79 | 32.64 | 25.74 | 226 | 0.17 |
| 120 | 6.05 | 33.55 | | 26.42 | 162 | 100 | 5.93 | 33.00 | 26.00 | 202 | 0.22 |
| 130 | 5.95 | 33.62 | | 26.49 | 155 | 150 | 5.73 | 33.73 | 26.61 | 144 | 0.31 |
| 140 | 5.87 | 33.69 | | 26.56 | 148 | 200 | 5.12 | 33.86 | 26.78 | 128 | 0.38 |
| 160 | 5.60 | 33.77 | | 26.65 | 140 | 250 | 5.01 | 33.91 | 26.83 | 123 | 0.44 |
| 200 | 5.12 | 33.86 | | 26.78 | 128 | 300 | 4.86 | 33.96 | 26.89 | 117 | 0.51 |
| 300 | 4.86 | 33.96 | | 26.89 | 117 | 400 | 4.35 | 34.02 | 26.99 | 108 | 0.62 |
| 500 | 3.96 | 34.08 | | 27.08 | 99 | 500 | 3.96 | 34.08 | 27.08 | 99 | 0.73 |
| 800 | 3.48 | 34.27 | | 27.28 | 80 | 600 | 3.84 | 34.15 | 27.15 | 92 | 0.83 |
| 1000 | 2.97 | 34.37 | | 27.41 | 68 | 800 | 3.48 | 34.27 | 27.28 | 80 | 1.01 |
| | | | | | | 1000 | 2.97 | 34.37 | 27.41 | 68 | 1.17 |

POG

NP-52-I

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| A6 | HMCS SAULT STE. MARIE; March 15, 1952; 1200 GCT; 48°31'N, 133°26'W; sounding, missing; wind, 320°, force 7; weather, clear; sea, moderate. | | | | | | | | | | |
| 5 | 6.75 | 32.67 | | 25.64 | 236 | 0 | (6.75) | (32.67) | (25.64) | (236) | (0.00) |
| 20 | 6.69u | 32.67 | | 25.65 | 235 | 10 | 6.76 | 32.67 | 25.64 | 236 | 0.02 |
| 60 | 6.78 | 32.67 | | 25.64 | 236 | 20 | 6.77 | 32.67 | 25.64 | 236 | 0.05 |
| 80 | 6.77 | 32.67 | | 25.64 | 236 | 30 | 6.77 | 32.67 | 25.64 | 236 | 0.07 |
| 100 | 6.76 | 32.67 | | 25.64 | 236 | 50 | 6.78 | 32.67 | 25.64 | 236 | 0.12 |
| 110 | 6.74 | 32.71 | | 25.67 | 233 | 75 | 6.77 | 32.67 | 25.64 | 236 | 0.18 |
| 120 | 6.60 | 32.98 | | 25.90 | 211 | 100 | 6.76 | 32.67 | 25.64 | 236 | 0.24 |
| 130 | 6.52 | 33.12 | | 26.02 | 200 | 150 | 6.37 | 33.51 | 26.35 | 168 | 0.34 |
| 140 | 6.37 | 33.40 | | 26.26 | 177 | 200 | 5.96 | 33.77 | 26.61 | 144 | 0.42 |
| 160 | 6.36 | 33.60 | | 26.42 | 162 | 250 | 5.37 | 33.83 | 26.73 | 132 | 0.49 |
| 200 | 5.96 | 33.77 | | 26.61 | 144 | 300 | 4.88 | 33.89 | 26.83 | 123 | 0.55 |
| 300 | 4.88 | 33.89 | | 26.83 | 123 | 400 | 4.41 | 33.97 | 26.95 | 111 | 0.67 |
| 500 | 4.02 | 34.05 | | 27.05 | 102 | 500 | 4.02 | 34.05 | 27.05 | 102 | 0.78 |
| 800 | 3.36 | 34.29 | | 27.31 | 77 | 600 | 3.79 | 34.15 | 27.15 | 92 | 0.89 |
| 1000 | 2.96 | 34.36 | | 27.40 | 69 | 800 | 3.36 | 34.29 | 27.31 | 77 | 1.07 |
| | | | | | | 1000 | 2.96 | 34.36 | 27.40 | 69 | 1.22 |
| A8 | HMCS SAULT STE. MARIE; March 15, 1952; 1800 GCT; 48°31'N, 132°24'W; sounding, missing; wind, missing; weather, missing; sea, moderate. | | | | | | | | | | |
| 5 | 6.45 | 32.55 | 6.48 | 25.59 | 240 | 0 | (6.45) | (32.55) | (25.59) | (240) | (0.00) |
| 20 | 6.38 | 32.55 | 6.34 | 25.59 | 240 | 10 | 6.42 | 32.55 | 25.59 | 240 | 0.02 |
| 60 | 6.43 | 32.57 | 6.31 | 25.60 | 240 | 20 | 6.38 | 32.55 | 25.59 | 240 | 0.05 |
| 80 | 6.45 | 32.55 | 6.32 | 25.59 | 240 | 30 | 6.39 | 32.56 | 25.60 | 240 | 0.07 |
| 100 | 6.50 | 32.79 | 5.65 | 25.77 | 223 | 50 | 6.42 | 32.57 | 25.60 | 240 | 0.12 |
| 110 | 6.53 | 33.12 | 4.63 | 26.02 | 200 | 75 | 6.44 | 32.56 | 25.59 | 240 | 0.18 |
| 120 | 6.58 | 33.41 | - | 26.25 | 178 | 100 | 6.50 | 32.79 | 25.77 | 223 | 0.24 |
| 130 | 6.63 | 33.50 | - | 26.31 | 172 | 150 | 6.64 | 33.70 | 26.47 | 157 | 0.34 |
| 140 | 6.62 | 33.60 | - | 26.39 | 164 | 200 | 6.36 | 33.82 | 26.60 | 145 | 0.41 |
| 160 | 6.64 | 33.77 | 2.55 | 26.52 | 152 | 250 | 5.95 | 33.88 | 26.70 | 135 | 0.48 |
| 200 | 6.36 | 33.82 | 2.29 | 26.60 | 145 | 300 | 5.60 | 33.93 | 26.78 | 128 | 0.55 |
| 300 | 5.60 | 33.93 | 1.70 | 26.78 | 128 | 400 | 5.13 | 33.99 | 26.88 | 118 | 0.68 |
| 500 | 4.71 | 34.05 | 0.68 | 26.98 | 109 | 500 | 4.71 | 34.05 | 26.98 | 109 | 0.80 |
| 800 | 3.71 | 34.23 | 0.36 | 27.23 | 85 | 600 | 4.33 | 34.11 | 27.07 | 100 | 0.90 |
| 1000u | 3.25 | 34.34 | 0.24 | 27.36 | 73 | 800 | 3.71 | 34.23 | 27.23 | 85 | 1.10 |
| | | | | | | 1000 | 3.27 | 34.35 | 27.36 | 73 | 1.27 |
| A10 | HMCS SAULT STE. MARIE; March 16, 1952; 0000 GCT; 48°30'N, 131°04'W; sounding, missing; wind, 320°, force 5; weather, clear; sea, moderate. | | | | | | | | | | |
| 5 | 6.52 | 32.65 | 6.01 | 25.66 | 234 | 0 | (6.52) | (32.65) | (25.66) | (234) | (0.00) |
| 20 | 6.46 | 32.65 | 5.86 | 25.66 | 234 | 10 | 6.50 | 32.65 | 25.66 | 234 | 0.02 |
| 60 | 6.49 | 32.65 | 6.34 | 25.66 | 234 | 20 | 6.46 | 32.65 | 25.66 | 234 | 0.05 |
| 80 | 6.48 | 32.65 | 6.28 | 25.66 | 234 | 30 | 6.47 | 32.65 | 25.66 | 234 | 0.07 |
| 100 | 6.54 | 32.72 | 6.01 | 25.71 | 229 | 50 | 6.49 | 32.65 | 25.66 | 234 | 0.12 |
| 110 | 6.56 | 33.19 | 4.60 | 26.07 | 195 | 75 | 6.48 | 32.65 | 25.66 | 234 | 0.18 |
| 120 | 6.54 | 33.33 | - | 26.19 | 184 | 100 | 6.54 | 32.72 | 25.71 | 229 | 0.23 |
| 130 | 6.56 | 33.50 | - | 26.32 | 171 | 150 | 6.63 | 33.64 | 26.42 | 162 | 0.33 |
| 140 | 6.58 | 33.55 | - | 26.36 | 167 | 200 | 6.33 | 33.91 | 26.67 | 138 | 0.41 |
| 160 | 6.65 | 33.72 | - | 26.48 | 156 | 250 | 5.95 | 33.96 | 26.76 | 129 | 0.48 |
| 200 | 6.33 | 33.91 | 2.47 | 26.67 | 138 | 300 | 5.60 | 34.00 | 26.83 | 123 | 0.54 |
| 300 | 5.60 | 34.00 | 1.43 | 26.83 | 123 | 400 | 5.00 | 34.07 | 26.96 | 110 | 0.66 |
| 500 | 4.53 | 34.13 | - | 27.06 | 101 | 500 | 4.53 | 34.13 | 27.06 | 101 | 0.77 |
| 800u | 3.61 | 34.26 | - | 27.26 | 82 | 600 | 4.19 | 34.17 | 27.13 | 94 | 0.88 |
| 1000u | 3.18 | 34.32 | - | 27.35 | 74 | 800 | 3.90 | 34.20 | 27.18 | 82 | 1.07 |
| | | | | | | 1000 | 4.13 | 34.16 | 27.13 | 74 | 1.27 |

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

HMCS SAULT STE. MARIE; March 16, 1952; 0600 GCT; 48°30'N, 129°52'W; sounding, missing; wind, 300°, force 4; weather, cloudy; sea, moderate. A12

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 6.52 | 32.62 | 25.63 | 237 | 0 | (6.52) | (32.62) | (25.63) | (237) | (0.00) |
| 20 | 6.55 | 32.62 | 25.63 | 237 | 10 | 6.53 | 32.62 | 25.63 | 237 | 0.02 |
| 60 | 6.55 | 32.62 | 25.63 | 237 | 20 | 6.55 | 32.62 | 25.63 | 237 | 0.05 |
| 80 | 6.55 | 32.60 | 25.61 | 239 | 30 | 6.55 | 32.62 | 25.63 | 237 | 0.07 |
| 100 | 6.52 | 32.98 | 25.91 | 210 | 50 | 6.55 | 32.62 | 25.63 | 237 | 0.12 |
| 110 | 6.49 | 33.22 | 26.11 | 191 | 75 | 6.55 | 32.61 | 25.62 | 238 | 0.18 |
| 120 | 6.49 | 33.46 | 26.30 | 173 | 100 | 6.52 | 32.98 | 25.91 | 210 | 0.23 |
| 130 | 6.55 | 33.53 | 26.34 | 169 | 150 | 6.65 | 33.73 | 26.49 | 155 | 0.33 |
| 140 | 6.64 | 33.62 | 26.40 | 164 | 200 | 6.26 | 33.89 | 26.66 | 139 | 0.40 |
| 160 | 6.66 | 33.81 | 26.55 | 149 | 250 | 5.88 | 33.94 | 26.75 | 130 | 0.47 |
| 200 | 6.26 | 33.89 | 26.66 | 139 | 300 | 5.54 | 33.98 | 26.83 | 123 | 0.54 |
| 300 | 5.54 | 33.98 | 26.83 | 123 | 400 | 5.05 | 34.05 | 26.94 | 112 | 0.66 |
| 500 | 4.62 | 34.12 | 27.04 | 103 | 500 | 4.62 | 34.12 | 27.04 | 103 | 0.77 |
| 800 | 3.67 | 34.31 | 27.29 | 79 | 600 | 4.27 | 34.20 | 27.14 | 93 | 0.87 |
| 1000 | 3.21 | 34.37 | 27.39 | 70 | 800 | 3.67 | 34.31 | 27.29 | 79 | 1.06 |
| | | | | | 1000 | 3.21 | 34.37 | 27.39 | 70 | 1.22 |

HMCS SAULT STE. MARIE; March 16, 1952; 1200 GCT; 48°30'N, 128°45'W; sounding, missing; wind, 320°, force 3; weather, clear; sea, rough. A14

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 7.14 | 32.46 | 25.42 | 257 | 0 | (7.14) | (32.46) | (25.42) | (257) | (0.00) |
| 20 | 7.13 | 32.46 | 25.43 | 256 | 10 | 7.13 | 32.46 | 25.43 | 256 | 0.03 |
| 60 | 7.24 | 32.50 | 25.44 | 255 | 20 | 7.13 | 32.46 | 25.43 | 256 | 0.05 |
| 80 | 7.20 | 32.64 | 25.56 | 243 | 30 | 7.18 | 32.47 | 25.43 | 256 | 0.08 |
| 100 | 7.62 | 33.52 | 26.19 | 184 | 50 | 7.24 | 32.46 | 25.41 | 258 | 0.13 |
| 110 | 7.54 | 33.60 | 26.26 | 177 | 75 | 7.21 | 32.54 | 25.48 | 251 | 0.19 |
| 120 | 7.37 | 33.67 | 26.34 | 169 | 100 | 7.62 | 33.52 | 26.19 | 184 | 0.25 |
| 130 | 7.18 | 33.74 | 26.42 | 162 | 150 | 7.01 | 33.80 | 26.49 | 155 | 0.33 |
| 140 | 7.07 | 33.76 | 26.45 | 159 | 200 | 6.64 | 33.91 | 26.63 | 142 | 0.41 |
| 160 | 6.95 | 33.84 | 26.53 | 151 | 250 | 6.12 | 33.96 | 26.74 | 131 | 0.48 |
| 200 | 6.64 | 33.91 | 26.63 | 142 | 300 | 5.66 | 34.01 | 26.83 | 123 | 0.54 |
| 300 | 5.66 | 34.01 | 26.83 | 123 | 400 | 5.00 | 34.08 | 26.97 | 110 | 0.66 |
| 500 | 4.47 | 34.15 | 27.08 | 99 | 500 | 4.47 | 34.15 | 27.08 | 99 | 0.77 |
| 800 | 3.60 | 34.31 | 27.30 | 78 | 600 | 4.12 | 34.21 | 27.17 | 91 | 0.87 |
| 1000 | 3.30 | 34.37 | 27.38 | 71 | 800 | 3.60 | 34.31 | 27.30 | 78 | 1.05 |
| | | | | | 1000 | 3.30 | 34.37 | 27.38 | 71 | 1.22 |

HMCS SAULT STE. MARIE; March 16, 1952; 1800 GCT; 48°33'N, 127°27'W; sounding, missing; wind, 320°, force 4; weather, cloudy; sea, slight. A16

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 8.18 | 32.76 | 5.93 | 25.51 | 248 | 0 | (8.18) | (32.76) | (25.51) | (248) | (0.00) |
| 20 | 8.19 | 32.76 | 5.93 | 25.51 | 248 | 10 | 8.18 | 32.76 | 25.51 | 248 | 0.02 |
| 60 | 8.22 | 32.76 | 5.75 | 25.51 | 248 | 20 | 8.19 | 32.76 | 25.51 | 248 | 0.05 |
| 80 | 8.22 | 32.76 | 5.64 | 25.51 | 248 | 30 | 8.20 | 32.76 | 25.51 | 248 | 0.07 |
| 100 | 8.63 | 33.24 | 3.93 | 25.82 | 219 | 50 | 8.22 | 32.76 | 25.51 | 248 | 0.12 |
| 110 | 8.54 | 33.40 | 3.54 | 25.96 | 205 | 75 | 8.22 | 32.76 | 25.51 | 248 | 0.19 |
| 120 | 8.50 | 33.53 | - | 26.07 | 195 | 100 | 8.63 | 33.24 | 25.82 | 219 | 0.24 |
| 130 | 8.49 | 33.58 | - | 26.11 | 191 | 150 | 8.45 | 33.68 | 26.19 | 184 | 0.35 |
| 140 | 8.47 | 33.64 | - | 26.16 | 186 | 200 | 7.80 | 33.79 | 26.37 | 166 | 0.44 |
| 160 | 8.39 | 33.72 | 2.59 | 26.23 | 180 | 250 | 7.16 | 33.87 | 26.53 | 151 | 0.52 |
| 200 | 7.80 | 33.79 | 2.46 | 26.37 | 166 | 300 | 6.59 | 33.94 | 26.66 | 139 | 0.59 |
| 300 | 6.59 | 33.94 | 1.89 | 26.66 | 139 | 400 | 5.77 | 34.01 | 26.82 | 124 | 0.73 |
| 500 | 5.09 | 34.08 | 0.65 | 26.96 | 110 | 500 | 5.09 | 34.08 | 26.96 | 110 | 0.85 |
| 800 | 3.91 | 34.27 | 0.43 | 27.24 | 84 | 600 | 4.55 | 34.15 | 27.07 | 100 | 0.96 |
| 1000u | 3.35 | 34.34 | 0.29 | 27.35 | 74 | 800 | 3.91 | 34.27 | 27.24 | 84 | 1.16 |
| | | | | | | 1000 | 3.84 | 34.38 | 27.33 | 74 | 1.33 |

| OBSERVED | | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| A18 | HMCS SAULT STE. MARIE; March 17, 1952; 0000 GCT; 48°32'N, 127°29'W; sounding, missing; wind, 300°, force 2; weather, cloudy; sea, moderate. | | | | | | | | | | |
| 5 | 8.23 | 32.76 | 5.75 | 25.50 | 249 | 0 | (8.23) | (32.76) | (25.50) | (249) | (0.00) |
| 20 | 8.22 | 32.77 | - | 25.51 | 248 | 10 | 8.23 | 32.76 | 25.50 | 249 | 0.02 |
| 50 | 8.21 | 31.78 | 5.84 | 24.74 | 321 | 20 | 8.22 | 32.77 | 25.51 | 248 | 0.05 |
| 60 | 8.20 | 32.79u | - | 25.53 | 246 | 30 | 8.22 | 32.18 | 25.05 | 292 | 0.08 |
| 80 | 8.59 | 33.15 | - | 25.76 | 224 | 50 | 8.21 | 31.78 | 24.74 | 321 | 0.14 |
| 100 | 8.56 | 33.46 | 3.35 | 26.00 | 202 | 75 | 8.53 | 33.00 | 25.65 | 235 | 0.21 |
| 110 | 8.50 | 33.53 | - | 26.07 | 195 | 100 | 8.56 | 33.46 | 26.00 | 202 | 0.26 |
| 120 | 8.54 | 33.62 | 2.91 | 26.13 | 189 | 150 | 8.38 | 33.73 | 26.24 | 179 | 0.36 |
| 130 | 8.49 | 33.67 | - | 26.18 | 184 | 200 | 7.73 | 33.82 | 26.41 | 163 | 0.45 |
| 140 | 8.43 | 33.69 | - | 26.20 | 183 | 250 | 7.07 | 33.91 | 26.57 | 148 | 0.52 |
| 160 | 8.30 | 33.76 | 2.50 | 26.28 | 175 | 300 | 6.50 | 33.98 | 26.70 | 135 | 0.60 |
| 200 | 7.73 | 33.82 | 2.46 | 26.41 | 163 | 400 | 5.77 | 34.02 | 26.83 | 123 | 0.73 |
| 300 | 6.50 | 33.98 | 1.83 | 26.70 | 135 | 500 | 5.16 | 34.08 | 26.95 | 111 | 0.85 |
| 500 | 5.16 | 34.08 | 0.79 | 26.95 | 111 | 600 | 4.71 | 34.18 | 27.08 | 99 | 0.96 |
| 800 | 4.00 | 34.32 | 0.30 | 27.27 | 81 | 800 | 4.00 | 34.32 | 27.27 | 81 | 1.16 |
| 1000 | 3.54 | 34.36 | 0.29 | 27.35 | 74 | 1000 | 3.54 | 34.36 | 27.35 | 74 | 1.33 |
| A20 | HMCS SAULT STE. MARIE; March 17, 1952; 0600 GCT; 48°34'N, 127°25'W; sounding, missing; wind, 220°, force 4; weather, squalls; sea, rough. | | | | | | | | | | |
| 5 | 8.20 | 32.74 | | 25.49 | 250 | 0 | (8.20) | (32.74) | (25.49) | (250) | (0.00) |
| 20 | 8.21 | 32.74 | | 25.49 | 250 | 10 | 8.20 | 32.74 | 25.49 | 250 | 0.02 |
| 40 | 8.22 | 32.74 | | 25.49 | 250 | 20 | 8.21 | 32.74 | 25.49 | 250 | 0.05 |
| 60 | 8.23 | 32.74 | | 25.49 | 250 | 30 | 8.22 | 32.74 | 25.49 | 250 | 0.08 |
| 80 | 8.24 | 32.74 | | 25.49 | 250 | 50 | 8.23 | 32.74 | 25.49 | 250 | 0.12 |
| 100 | 8.53 | 33.41 | | 25.97 | 204 | 75 | 8.24 | 32.74 | 25.49 | 250 | 0.19 |
| 110 | 8.54 | 33.53 | | 26.06 | 196 | 100 | 8.53 | 33.41 | 25.97 | 204 | 0.24 |
| 120 | 8.53 | 33.60 | | 26.12 | 190 | 150 | 8.42 | 33.64 | 26.16 | 186 | 0.34 |
| 130 | 8.52 | 33.64 | | 26.15 | 187 | 200 | 8.05 | 33.76 | 26.31 | 172 | 0.44 |
| 140 | 8.48 | 33.64 | | 26.16 | 186 | 250 | 7.35 | 33.86 | 26.49 | 155 | 0.52 |
| 160 | 8.36 | 33.65 | | 26.18 | 184 | 300 | 6.74 | 33.94 | 26.64 | 141 | 0.59 |
| 200 | 8.05 | 33.76 | | 26.31 | 172 | 400 | 5.88 | 34.01 | 26.81 | 125 | 0.73 |
| 300 | 6.74 | 33.94 | | 26.64 | 141 | 500 | 5.17 | 34.08 | 26.95 | 111 | 0.86 |
| 500 | 5.17 | 34.08 | | 26.95 | 111 | 600 | 4.73 | 34.17 | 27.07 | 100 | 0.97 |
| 800 | 3.99 | 34.31 | | 27.26 | 82 | 800 | 3.99 | 34.31 | 27.26 | 82 | 1.16 |
| 1000 | 3.46 | 34.42 | | 27.40 | 69 | 1000 | 3.46 | 34.42 | 27.40 | 69 | 1.33 |

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| USS MARYSVILLE; April 24, 1952; 0453, 0311 GCT; 24°05'N, 118°19.5'W; sounding, 2140 fm; wind, 020°, force 1; weather, rain; sea, rough; wire angle, 05°, 13°.[a] | | | | | | | | | | 1 |
| 0 | 17.79 | 33.96 | 24.55 | 340 | 0 | 17.79 | 33.96 | 24.55 | 340 | 0.00 |
| 10 | 17.60 | 33.96 | 24.59 | 335 | 10 | 17.60 | 33.96 | 24.59 | 335 | 0.03 |
| 25 | 17.60 | 34.02 | 24.64 | 331 | 20 | 17.60 | 34.01 | 24.63 | 332 | 0.07 |
| 50 | 16.66 | 33.87 | 24.75 | 321 | 30 | 17.54 | 34.01 | 24.65 | 330 | 0.10 |
| 75 | 16.77 | 33.94 | 24.78 | 318 | 50 | 16.66 | 33.87 | 24.75 | 321 | 0.17 |
| 99 | 15.98 | 33.86 | 24.90 | 307 | 75 | 16.77 | 33.94 | 24.78 | 318 | 0.25 |
| 149 | 11.40 | 33.79 | 25.78 | 222 | 100 | 15.94 | 33.86 | 24.90 | 306 | 0.32 |
| 198 | 9.91 | 34.13 | 26.31 | 172 | 150 | 11.35 | 33.79 | 25.79 | 221 | 0.46 |
| 297 | 9.29 | 34.48 | 26.68 | 137 | 200 | 9.89 | 34.14 | 26.32 | 171 | 0.56 |
| 396 | 8.07 | 34.50 | 26.89 | 117 | 250 | 9.58 | 34.36 | 26.54 | 150 | 0.64 |
| 494 | 6.84 | 34.47 | 27.04 | 102 | 300 | 9.26 | 34.48 | 26.69 | 136 | 0.72 |
| 592 | 6.06 | 34.49 | 27.16 | 91 | 400 | 8.02 | 34.50 | 26.90 | 116 | 0.85 |
| | | | | | 500 | 6.79 | 34.47 | 27.05 | 102 | 0.96 |
| 484b) | 7.09 | 34.47 | 27.01 | 106 | 600 | 6.07 | 34.48 | 27.15 | 92 | 1.07 |
| 581 | 6.22 | 34.47 | 27.13 | 95 | 700 | 5.51 | 34.49 | 27.23 | 85 | 1.17 |
| 629 | 5.90 | 34.49 | 27.18 | 89 | 800 | 5.00 | 34.50 | 27.30 | 78 | 1.26 |
| 677 | 5.67 | 34.49 | 27.21 | 87 | 1000 | 4.19 | 34.53 | 27.41 | 67 | 1.42 |
| 726 | 5.33 | 34.49 | 27.25 | 83 | 1200 | 3.58 | 34.58 | 27.52 | 58 | 1.56 |
| 774 | 5.12 | 34.59u | | | 1500 | 2.89 | 34.68 | 27.66 | 44 | 1.75 |
| 823 | 4.89 | 34.50 | 27.31 | 77 | 2000 | (2.13) | (34.66) | (27.71) | (39) | (2.00) |
| 871 | 4.67 | 34.49 | 27.33 | 75 | | | | | | |
| 968 | 4.29 | 34.52 | 27.40 | 69 | | | | | | |
| 1163 | 3.67 | 34.57 | 27.50 | 59 | | | | | | |
| 1455 | 2.97 | 34.62 | 27.61 | 49 | | | | | | |
| 1944 | 2.20 | 34.66 | 27.71 | 40 | | | | | | |
| USS MARYSVILLE; April 24, 1952; missing, 1706, 1852 GCT; 22°35'N, 118°32.5'W; sounding, 2100 fm; wind, 010°, force 1; weather, cloudy; sea, moderate; wire angle, missing, 15°, missing. | | | | | | | | | | 2 |
| 0 | 18.61 | 34.12 | 24.47 | 347 | 0 | 18.61 | 34.12 | 24.47 | 347 | 0.00 |
| 10 | 18.41 | 34.10 | 24.50 | 344 | 10 | 18.41 | 34.10 | 24.50 | 344 | 0.03 |
| 25 | 18.33 | 34.10 | 24.52 | 342 | 20 | 18.38 | 34.10 | 24.51 | 343 | 0.07 |
| 50 | 17.87 | 34.09 | 24.63 | 332 | 30 | 18.31 | 34.10 | 24.53 | 342 | 0.10 |
| 73 | 17.13 | 34.14 | 24.84 | 312 | 50 | 17.87 | 34.09 | 24.63 | 332 | 0.17 |
| 97 | 15.99 | 33.92 | 24.94 | 302 | 75 | 17.10 | 34.14 | 24.85 | 311 | 0.25 |
| 146 | 11.55 | 33.81 | 25.77 | 223 | 100 | 15.40 | 33.91 | 25.06 | 291 | 0.33 |
| 195 | 10.65 | 34.21 | 26.24 | 179 | 150 | 11.45 | 33.81 | 25.79 | 222 | 0.46 |
| 293 | 9.63 | 34.42 | 26.58 | 146 | 200 | 10.62 | 34.26 | 26.29 | 174 | 0.56 |
| 392 | 8.00 | 34.44 | 26.85 | 120 | 250 | 10.10 | 34.40 | 26.49 | 155 | 0.64 |
| 491 | 7.02 | 34.47 | 27.02 | 105 | 300 | 9.50 | 34.43 | 26.61 | 144 | 0.72 |
| 593 | 6.05 | 34.50 | 27.17 | 90 | 400 | 7.92 | 34.44 | 26.87 | 119 | 0.86 |
| | | | | | 500 | 6.86 | 34.46 | 27.03 | 103 | 0.98 |
| 496b) | 6.89 | 34.45 | 27.02 | 105 | 600 | 6.01 | 34.47 | 27.15 | 92 | 1.08 |
| 596 | 6.06 | 34.49 | 27.16 | 91 | 700 | 5.38 | 34.48 | 27.24 | 84 | 1.18 |
| 645 | 5.70 | 34.45 | 27.18 | 90 | 800 | 4.87 | 34.50 | 27.32 | 77 | 1.27 |
| 696 | 5.40 | 34.50 | 27.25 | 83 | 1000 | 4.11 | 34.52 | 27.41 | 67 | 1.43 |
| 747 | 5.13 | 34.47 | 27.26 | 82 | 1200 | 3.59 | 34.58 | 27.52 | 58 | 1.57 |
| 797 | 4.89 | 34.51 | 27.32 | 76 | 1500 | 2.84 | 34.60 | 27.60 | 50 | 1.76 |
| 847 | 4.71 | 34.51 | 27.34 | 74 | 2000 | 2.09 | 34.63 | 27.69 | 41 | 2.04 |
| 898 | 4.46 | 34.52 | 27.38 | 71 | | | | | | |
| 1000 | 4.11 | 34.52 | 27.41 | 67 | | | | | | |
| 1202 | 3.58 | 34.58 | 27.52 | 58 | | | | | | |
| 1506 | 2.84 | 34.60 | 27.60 | 50 | | | | | | |
| 2017 | 2.08 | 34.63 | 27.69 | 41 | | | | | | |

a) The final processing of these data was done by the Data Collecting and Processing Group of Scripps Institution.

b) Overlapping casts; reconciliation of property curves when necessary.

USNEL SHUTTLE

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

3 USS MARYSVILLE; April 25, 1952; 1010, 0751 GCT; 20°59'N, 119°17.5'W; sounding, 2080 fm; wind, 020°, force 3; weather, cloudy; sea, moderate; wire angle, 10°, 14°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.12 | 34.48 | 24.35 | 358 | 0 | 20.12 | 34.48 | 24.35 | 358 | 0.00 |
| 10 | 20.13 | 34.44 | 24.32 | 361 | 10 | 20.13 | 34.44 | 24.32 | 361 | 0.04 |
| 25 | 20.10 | 34.46 | 24.34 | 359 | 20 | 20.12 | 34.46 | 24.34 | 360 | 0.07 |
| 50 | 18.73 | 34.19 | 24.49 | 345 | 30 | 20.09 | 34.46 | 24.35 | 359 | 0.11 |
| 75 | 18.28 | 34.14 | 24.56 | 338 | 50 | 18.73 | 34.19 | 24.49 | 345 | 0.18 |
| 100 | 17.57 | 34.02 | 24.65 | 330 | 75 | 18.28 | 34.14 | 24.56 | 338 | 0.26 |
| 151 | 11.40 | 33.99 | 25.94 | 208 | 100 | 17.57 | 34.02 | 24.65 | 330 | 0.35 |
| 201 | 11.16 | 34.49 | 26.37 | 167 | 150 | 11.41 | 33.99 | 25.93 | 208 | 0.49 |
| 301 | 9.67 | 34.53 | 26.66 | 139 | 200 | 11.17 | 34.48 | 26.36 | 167 | 0.58 |
| 401 | 8.26 | 34.49 | 26.85 | 120 | 250 | 10.45 | 34.54 | 26.53 | 151 | 0.66 |
| 501 | 7.23 | 34.46 | 26.98 | 108 | 300 | 9.70 | 34.53 | 26.66 | 139 | 0.74 |
| 602 | 6.40 | 34.47 | 27.10 | 97 | 400 | 8.28 | 34.49 | 26.85 | 121 | 0.88 |
| | | | | | 500 | 7.20 | 34.47 | 26.99 | 107 | 1.00 |
| 494a) | 7.11 | 34.48 | 27.01 | 105 | 600 | 6.31 | 34.47 | 27.12 | 96 | 1.11 |
| 593 | 6.35 | 34.48 | 27.12 | 95 | 700 | 5.72 | 34.48 | 27.20 | 88 | 1.21 |
| 643 | 5.99 | 34.49 | 27.17 | 90 | 800 | 5.13 | 34.51 | 27.29 | 79 | 1.30 |
| 693 | 5.76 | 34.48 | 27.19 | 88 | 1000 | 4.34 | 34.52 | 27.39 | 70 | 1.47 |
| 744 | 5.45 | 34.51 | 27.26 | 82 | 1200 | 3.70 | 34.54 | 27.47 | 62 | 1.62 |
| 793 | 5.17 | 34.50 | 27.28 | 80 | 1500 | 2.95 | 34.56 | 27.56 | 54 | 1.82 |
| 844 | 4.93 | 34.52 | 27.32 | 76 | | | | | | |
| 894 | 4.72 | 34.52 | 27.35 | 74 | | | | | | |
| 994 | 4.37 | 34.52 | 27.39 | 70 | | | | | | |
| 1196 | 3.72 | 34.55 | 27.48 | 61 | | | | | | |
| 1501 | 2.94 | 34.56 | 27.56 | 53 | | | | | | |

5 USS MARYSVILLE; April 27, 1952; 1023, 0844 GCT; 18°32'N, 118°38'W; sounding, 2080 fm; wind, 010°, force 3; weather, overcast; sea, smooth; wire angle, 35°, 42°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.51 | 34.23 | 23.51 | 439 | 0 | 22.51 | 34.23 | 23.51 | 439 | 0.00 |
| 10 | 22.52 | 34.24 | 23.52 | 438 | 10 | 22.52 | 34.24 | 23.52 | 438 | 0.04 |
| 23 | 22.54 | 34.26 | 23.53 | 437 | 20 | 22.54 | 34.25 | 23.52 | 438 | 0.09 |
| 47 | 20.79 | 34.47 | 24.17 | 376 | 30 | 22.53 | 34.33 | 23.58 | 432 | 0.13 |
| 71 | 20.27 | 34.46 | 24.30 | 363 | 50 | 20.70 | 34.47 | 24.19 | 374 | 0.21 |
| 93 | 19.35 | 34.38 | 24.48 | 346 | 75 | 20.20 | 34.45 | 24.31 | 362 | 0.30 |
| 139 | 13.75 | 34.01 | 25.49 | 250 | 100 | 18.55 | 34.31 | 24.63 | 332 | 0.39 |
| 185 | 11.22 | 34.28 | 26.19 | 183 | 150 | 12.66 | 34.01 | 25.71 | 229 | 0.53 |
| 278 | 9.86 | 34.54 | 26.64 | 141 | 200 | 11.00 | 34.36 | 26.30 | 173 | 0.64 |
| 374 | 8.49 | 34.50 | 26.83 | 123 | 250 | 10.27 | 34.51 | 26.54 | 150 | 0.72 |
| 474 | 7.19 | 34.48 | 27.00 | 106 | 300 | 9.59 | 34.54 | 26.68 | 137 | 0.79 |
| 582 | 6.43 | 34.49 | 27.12 | 96 | 400 | 8.19 | 34.49 | 26.87 | 119 | 0.93 |
| | | | | | 500 | 7.11 | 34.49 | 27.02 | 105 | 1.05 |
| 435a) | 7.73 | 34.48 | 26.93 | 114 | 600 | 6.33 | 34.50 | 27.14 | 94 | 1.16 |
| 526 | 6.99 | 34.51 | 27.06 | 101 | 700 | 5.58 | 34.51 | 27.24 | 84 | 1.25 |
| 617 | 6.20 | 34.49 | 27.15 | 93 | 800 | 5.08 | 34.51 | 27.30 | 78 | 1.34 |
| 707 | 5.54 | 34.52 | 27.25 | 83 | 1000 | 4.19 | 34.56 | 27.44 | 65 | 1.51 |
| 754 | 5.32 | 34.51 | 27.27 | 81 | 1200 | 3.56 | 34.59 | 27.53 | 57 | 1.65 |
| 800 | 5.08 | 34.52 | 27.31 | 78 | 1500 | 2.85 | 34.62 | 27.62 | 48 | 1.83 |
| 847 | 4.77 | 34.51 | 27.33 | 75 | | | | | | |
| 892 | 4.62 | 34.53 | 27.37 | 72 | | | | | | |
| 939 | 4.45 | 34.55 | 27.40 | 69 | | | | | | |
| 1079 | 3.89 | 34.58 | 27.49 | 61 | | | | | | |
| 1369 | 3.14 | 34.60 | 27.57 | 52 | | | | | | |
| 1886 | 2.22 | 34.67 | 27.71 | 39 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

USS MARYSVILLE; April 28, 1952; 0413, 0231 GCT; 16°51'N, 117°03'W; sounding, 1540 fm; wind, 010°, force 4; weather, overcast; sea, rough; wire angle, 35°, 42°. 6

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.48 | 34.20 | 23.21 | 467 | 0 | 23.48 | 34.20 | 23.21 | 467 | 0.00 |
| 11 | 23.48 | 34.23 | 23.23 | 465 | 10 | 23.48 | 34.23 | 23.23 | 465 | 0.05 |
| 26 | 21.86 | 34.38 | 23.81 | 410 | 20 | 23.48 | 34.30 | 23.29 | 460 | 0.09 |
| 53 | 20.34 | 34.43 | 24.26 | 367 | 30 | 21.40 | 34.40 | 23.95 | 397 | 0.14 |
| 81 | 19.71 | 34.40 | 24.40 | 354 | 50 | 20.40 | 34.43 | 24.24 | 369 | 0.21 |
| 105 | 17.10 | 34.01 | 24.75 | 320 | 75 | 19.85 | 34.41 | 24.37 | 357 | 0.30 |
| 158 | 11.41 | 34.28 | 26.16 | 186 | 100 | 18.25 | 34.37 | 24.75 | 321 | 0.39 |
| 211 | 11.68 | 34.73 | 26.46 | 158 | 150 | 11.44 | 34.28 | 26.15 | 187 | 0.52 |
| 318 | 10.01 | 34.68 | 26.72 | 133 | 200 | 11.93 | 34.73 | 26.41 | 162 | 0.61 |
| 428 | 8.59 | 34.56 | 26.86 | 120 | 250 | 11.11 | 34.70 | 26.54 | 150 | 0.69 |
| 539 | 7.13 | 34.54 | 27.06 | 101 | 300 | 10.30 | 34.68 | 26.67 | 138 | 0.76 |
| 656 | 6.10 | 34.52 | 27.18 | 89 | 400 | 8.94 | 34.57 | 26.81 | 125 | 0.90 |
| | | | | | 500 | 7.66 | 34.55 | 26.99 | 107 | 1.03 |
| 581a) | 6.59 | 34.52 | 27.12 | 96 | 600 | 6.44 | 34.52 | 27.14 | 94 | 1.14 |
| 739 | 5.49 | 34.52 | 27.26 | 82 | 700 | 5.78 | 34.52 | 27.22 | 86 | 1.23 |
| 791 | 5.24 | 34.54 | 27.30 | 78 | 800 | 5.21 | 34.53 | 27.30 | 78 | 1.32 |
| 843 | 4.90 | 34.52 | 27.33 | 76 | 1000 | 4.25 | 34.55 | 27.42 | 67 | 1.49 |
| 895 | 4.65 | 34.53 | 27.36 | 72 | 1200 | 3.58 | 34.60 | 27.53 | 56 | 1.63 |
| 948 | 4.45 | 34.55 | 27.40 | 69 | 1500 | 2.93 | 34.61 | 27.60 | 50 | 1.82 |
| 1000 | 4.25 | 34.55 | 27.42 | 67 | 2000 | 2.13 | 34.64 | 27.69 | 41 | 2.09 |
| 1053 | 4.06 | 34.57 | 27.46 | 63 | 2500 | 1.75 | 34.68 | 27.76 | 35 | 2.33 |
| 1211 | 3.54 | 34.60 | 27.54 | 56 | | | | | | |
| 1531 | 2.88 | 34.61 | 27.61 | 49 | | | | | | |
| 2077 | 2.05 | 34.64 | 27.70 | 40 | | | | | | |
| 2668 | 1.68 | 34.81 | 27.87 | 25 | | | | | | |

USS MARYSVILLE; April 29-28, 1952; 0100, 2250, 2337 GCT; 17°51'N, 115°32'W; sounding, 2080 fm; wind, 020°, force 4; weather, overcast; sea, very rough; wire angle, 32°, 40°, 40°. 7

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.53 | 34.06 | 22.79 | 507 | 0 | 24.53 | 34.06 | 22.79 | 507 | 0.00 |
| 12 | 24.54 | 34.05 | 22.78 | 508 | 10 | 24.53 | 34.05 | 22.79 | 508 | 0.05 |
| 28 | 23.32 | 34.33 | 23.35 | 454 | 20 | 24.53 | 34.11 | 22.83 | 503 | 0.10 |
| 55 | 20.78 | 34.42 | 24.13 | 379 | 30 | 23.65 | 34.35 | 23.27 | 461 | 0.15 |
| 82 | 16.05 | 34.05 | 25.03 | 294 | 50 | 21.35 | 34.42 | 23.98 | 394 | 0.24 |
| 108 | 13.83 | 34.18 | 25.61 | 239 | 75 | 17.30 | 34.19 | 24.84 | 312 | 0.32 |
| 159 | 12.57 | 34.71 | 26.27 | 176 | 100 | 14.45 | 34.08 | 25.40 | 259 | 0.40 |
| 212 | 11.61 | 34.72 | 26.46 | 157 | 150 | 12.76 | 34.67 | 26.20 | 182 | 0.51 |
| 318 | 10.09 | 34.66 | 26.69 | 136 | 200 | 11.84 | 34.72 | 26.42 | 162 | 0.60 |
| 432 | 8.53 | 34.59 | 26.89 | 117 | 250 | 11.04 | 34.70 | 26.55 | 149 | 0.68 |
| 547 | 7.28 | 34.58 | 27.07 | 100 | 300 | 10.35 | 34.67 | 26.65 | 140 | 0.75 |
| 666 | 6.15 | 34.54 | 27.19 | 89 | 400 | 8.97 | 34.61 | 26.84 | 122 | 0.89 |
| | | | | | 500 | 7.73 | 34.53 | 26.97 | 110 | 1.01 |
| 500a) | 7.73 | 34.53 | 26.97 | 110 | 600 | 6.80 | 34.52 | 27.09 | 98 | 1.13 |
| 604 | 6.76 | 34.52 | 27.09 | 98 | 700 | 5.93 | 34.52 | 27.20 | 87 | 1.23 |
| 710 | 5.87 | 34.52 | 27.21 | 87 | 800 | 5.33 | 34.53 | 27.29 | 80 | 1.32 |
| 764 | 5.51 | 34.54 | 27.27 | 81 | 1000 | 4.41 | 34.55 | 27.41 | 68 | 1.49 |
| 818 | 5.21 | 34.53 | 27.30 | 78 | 1200 | 3.83 | 34.59 | 27.50 | 59 | 1.64 |
| 872 | 5.00 | 34.56 | 27.35 | 74 | 1500 | 3.02 | 34.63 | 27.61 | 49 | 1.83 |
| 925 | 4.74 | 34.54 | 27.36 | 72 | 2000 | 2.20 | 34.68 | 27.72 | 38 | 2.10 |
| 979 | 4.47 | 34.54 | 27.39 | 70 | | | | | | |
| 1033 | 4.32 | 34.56 | 27.42 | 66 | | | | | | |
| 1249 | 3.68 | 34.60 | 27.52 | 57 | | | | | | |
| 1578 | 2.86 | 34.68 | 27.66 | 44 | | | | | | |
| 2150 | 1.99 | 34.69 | 27.75 | 36 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

USNEL SHUTTLE

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 8 | USS MARYSVILLE; April 30, 1952; 0642, 0703, 0502 GCT; 18°18'N, 114°03'W; sounding, 1670 fm; wind, 020°, force 3; weather, partly cloudy; sea, rough; wire angle, 32°, missing, 35°. | | | | | | | | | |
| 0 | 22.52 | 34.38 | 23.62 | 428 | 0 | 22.52 | 34.38 | 23.62 | 428 | 0.00 |
| 11 | 22.52 | 34.38 | 23.62 | 428 | 10 | 22.52 | 34.38 | 23.62 | 428 | 0.04 |
| 28 | 22.55 | 34.43 | 23.65 | 425 | 20 | 22.52 | 34.40 | 23.64 | 427 | 0.09 |
| 54 | 21.33 | 34.47 | 24.02 | 390 | 30 | 22.45 | 34.43 | 23.68 | 423 | 0.13 |
| 78 | 19.88 | 34.47 | 24.41 | 353 | 50 | 21.50 | 34.47 | 23.97 | 394 | 0.21 |
| 101 | 15.28 | 33.84 | 25.04 | 293 | 75 | 20.15 | 34.47 | 24.34 | 360 | 0.30 |
| 147 | 13.18 | 34.56 | 26.03 | 198 | 100 | 15.35 | 33.84 | 25.02 | 295 | 0.39 |
| | | | | | 150 | 13.03 | 34.58 | 26.08 | 194 | 0.51 |
| 192 | 11.93 | 34.67 | 26.37 | 167 | 200 | 11.79 | 34.67 | 26.39 | 164 | 0.60 |
| 285 | 10.52 | 34.69 | 26.64 | 141 | 250 | 10.95 | 34.69 | 26.56 | 148 | 0.68 |
| 393 | 9.29 | 34.65 | 26.82 | 124 | 300 | 10.34 | 34.69 | 26.67 | 138 | 0.76 |
| 506 | 7.63 | 34.52 | 26.97 | 109 | 400 | 9.19 | 34.64 | 26.83 | 123 | 0.90 |
| 623 | 6.45 | 34.52 | 27.14 | 94 | 500 | 7.72 | 34.53 | 26.97 | 110 | 1.02 |
| | | | | | 600 | 6.78 | 34.52 | 27.09 | 98 | 1.13 |
| 535a) | 7.38 | 34.52 | 27.01 | 106 | 700 | 6.00 | 34.52 | 27.19 | 88 | 1.24 |
| 643 | 6.42 | 34.52 | 27.14 | 93 | 800 | 5.24 | 34.52 | 27.29 | 79 | 1.33 |
| 751 | 5.62 | 34.52 | 27.24 | 84 | 1000 | 4.37 | 34.51 | 27.38 | 71 | 1.50 |
| 806 | 5.17 | 34.52 | 27.30 | 79 | 1200 | 3.62 | 34.53 | 27.47 | 62 | 1.65 |
| 860 | 4.95 | 34.51 | 27.31 | 77 | 1500 | 2.83 | 34.63 | 27.63 | 47 | 1.84 |
| 915 | 4.80 | 34.51 | 27.33 | 75 | 2000 | 2.14 | 34.63 | 27.69 | 42 | 2.11 |
| 968 | 4.52 | 34.51 | 27.36 | 72 | | | | | | |
| 1022 | 4.27 | 34.51 | 27.39 | 70 | | | | | | |
| 1078 | 4.11 | 34.49 | 27.39 | 70 | | | | | | |
| 1277 | 3.34 | 34.56 | 27.52 | 57 | | | | | | |
| 1630 | 2.59 | 34.60 | 27.62 | 48 | | | | | | |
| 2209 | 1.93 | 34.65 | 27.72 | 39 | | | | | | |
| 9 | USS MARYSVILLE; April 30, 1952; 2051 GCT; 18°30'N, 112°18'W; sounding, 1830 fm; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 35°. | | | | | | | | | |
| 0 | 23.64 | 34.63 | 23.49 | 441 | 0 | 23.64 | 34.63 | 23.49 | 441 | 0.00 |
| 31 | 23.50 | 34.63 | 23.53 | 437 | 10 | 23.61 | 34.63 | 23.50 | 440 | 0.04 |
| 60 | 23.06 | 34.63 | 23.66 | 425 | 20 | 23.55 | 34.63 | 23.51 | 438 | 0.09 |
| 89 | 20.29 | 34.29 | 24.16 | 376 | 30 | 23.50 | 34.63 | 23.53 | 437 | 0.13 |
| 116 | 15.97 | 34.29 | 25.23 | 275 | 50 | 23.38 | 34.63 | 23.56 | 434 | 0.22 |
| 172 | 12.53 | 34.70 | 26.27 | 176 | 75 | 21.60 | 34.47 | 23.95 | 397 | 0.32 |
| 227 | 11.58 | 34.74 | 26.49 | 155 | 100 | 18.20 | 34.29 | 24.70 | 325 | 0.41 |
| 446 | 8.36 | 34.56 | 26.89 | 117 | 150 | 13.30 | 34.42 | 25.90 | 211 | 0.55 |
| 671 | 6.04 | 34.52 | 27.19 | 89 | 200 | 12.02 | 34.73 | 26.39 | 164 | 0.65 |
| 788 | 5.35 | 34.52 | 27.28 | 81 | 250 | 11.22 | 34.72 | 26.54 | 151 | 0.73 |
| 907 | 4.76 | 34.52 | 27.34 | 74 | 300 | 10.43 | 34.66 | 26.63 | 142 | 0.80 |
| 1033 | 4.29 | 34.54 | 27.41 | 68 | 400 | 8.96 | 34.59 | 26.82 | 123 | 0.94 |
| 1159 | 3.80 | 34.56 | 27.48 | 61 | 500 | 7.74 | 34.54 | 26.97 | 109 | 1.07 |
| 1420 | 3.03 | 34.63 | 27.61 | 49 | 600 | 6.70 | 34.52 | 27.10 | 97 | 1.18 |
| | | | | | 700 | 5.86 | 34.52 | 27.21 | 87 | 1.28 |
| | | | | | 800 | 5.28 | 34.52 | 27.28 | 80 | 1.37 |
| | | | | | 1000 | 4.42 | 34.53 | 27.39 | 70 | 1.54 |
| | | | | | 1200 | 3.67 | 34.57 | 27.50 | 59 | 1.69 |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

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USS MARYSVILLE ; May 1, 1952; 1302, 1104, 1147 GCT; 18°30'N, 110°31'W; sounding, 1720 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 25°, 20°, 27°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.22 | 34.54 | 23.25 | 464 | 0 | 24.22 | 34.54 | 23.25 | 464 | 0.00 |
| 9 | 24.23 | 34.49 | 23.21 | 467 | 10 | 24.22 | 34.49 | 23.21 | 467 | 0.05 |
| 23 | 24.25 | 34.52 | 23.23 | 466 | 20 | 24.22 | 34.52 | 23.23 | 465 | 0.09 |
| 47 | 23.05 | 34.52 | 23.58 | 432 | 30 | 24.22 | 34.52 | 23.23 | 465 | 0.14 |
| 71 | 18.49 | 34.11 | 24.49 | 345 | 50 | 22.55 | 34.52 | 23.72 | 419 | 0.23 |
| 93 | 15.60 | 34.39 | 25.39 | 260 | 75 | 17.85 | 34.11 | 24.65 | 330 | 0.32 |
| 137 | 12.87 | 34.75 | 26.24 | 178 | 100 | 14.95 | 34.45 | 25.58 | 242 | 0.39 |
| 182 | 12.02 | 34.76 | 26.42 | 162 | 150 | 12.60 | 34.76 | 26.31 | 173 | 0.50 |
| 272 | 10.89 | 34.73 | 26.60 | 144 | 200 | 11.82 | 34.76 | 26.46 | 158 | 0.58 |
| 369 | 9.34 | 34.65 | 26.81 | 125 | 250 | 11.19 | 34.74 | 26.56 | 149 | 0.66 |
| 466 | 7.84 | 34.60 | 27.00 | 106 | 300 | 10.45 | 34.71 | 26.67 | 138 | 0.74 |
| 565 | 6.72 | 34.54 | 27.12 | 96 | 400 | 8.87 | 34.63 | 26.87 | 119 | 0.88 |
| | | | | | 500 | 7.45 | 34.58 | 27.05 | 102 | 0.99 |
| 474a) | 7.42 | 34.61 | 27.07 | 100 | 600 | 6.34 | 34.54 | 27.17 | 91 | 1.10 |
| 588 | 6.43 | 34.54 | 27.15 | 92 | 700 | 5.69 | 34.56 | 27.27 | 82 | 1.19 |
| 701 | 5.67 | 34.56 | 27.27 | 81 | 800 | 5.17 | 34.58 | 27.34 | 74 | 1.28 |
| 758 | 5.35 | 34.58 | 27.32 | 76 | 1000 | 4.26 | 34.58 | 27.45 | 64 | 1.44 |
| 815 | 5.09 | 34.58 | 27.35 | 73 | 1200 | 3.77 | 34.59 | 27.51 | 59 | 1.58 |
| 872 | 4.74 | 34.58 | 27.39 | 69 | 1500 | 3.07 | 34.63 | 27.61 | 49 | 1.77 |
| 929 | 4.55 | 34.61 | 27.44 | 65 | 2000 | 2.21 | 34.68 | 27.72 | 38 | 2.04 |
| 986 | 4.31 | 34.58 | 27.44 | 65 | | | | | | |
| 1043 | 4.15 | 34.58 | 27.46 | 63 | | | | | | |
| 1387 | 3.34 | 34.61 | 27.56 | 53 | | | | | | |
| 1618 | 2.81 | 34.65 | 27.64 | 46 | | | | | | |
| 2202 | 1.92 | 34.69 | 27.75 | 35 | | | | | | |

11

USS MARYSVILLE; May 2, 1952; 0256, 0023 GCT; 18°31'N, 108°43.5'W; sounding, 1980 fm; wind, 340°, force 3; weather, overcast; sea, very rough; wire angle, 15°, 23°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.09 | 34.54 | 22.99 | 489 | 0 | 25.09 | 34.54 | 22.99 | 489 | 0.00 |
| 11 | 25.10 | 34.54 | 22.98 | 489 | 10 | 25.09 | 34.54 | 22.99 | 489 | 0.05 |
| 26 | 25.01 | 34.54 | 23.01 | 486 | 20 | 25.02 | 34.54 | 23.01 | 487 | 0.10 |
| 52 | 22.56 | 34.56 | 23.75 | 416 | 30 | 24.99 | 34.54 | 23.02 | 486 | 0.15 |
| 77 | 15.68 | 34.43 | 25.40 | 259 | 50 | 22.95 | 34.56 | 23.64 | 427 | 0.24 |
| 103 | 13.85 | 34.65 | 25.97 | 205 | 75 | 15.90 | 34.43 | 25.35 | 263 | 0.32 |
| 153 | 12.50 | 34.79 | 26.35 | 169 | 100 | 13.97 | 34.60 | 25.90 | 211 | 0.38 |
| 203 | 11.84 | 34.76 | 26.45 | 159 | 150 | 12.54 | 34.79 | 26.34 | 169 | 0.48 |
| 305 | 10.36 | 34.69 | 26.67 | 138 | 200 | 11.88 | 34.77 | 26.45 | 159 | 0.57 |
| 407 | 8.67 | 34.61 | 26.89 | 118 | 250 | 11.22 | 34.73 | 26.54 | 150 | 0.65 |
| 510 | 7.35 | 34.52 | 27.01 | 105 | 300 | 10.45 | 34.70 | 26.66 | 139 | 0.72 |
| 612 | 6.32 | 34.54 | 27.17 | 91 | 400 | 8.78 | 34.62 | 26.88 | 118 | 0.86 |
| | | | | | 500 | 7.47 | 34.51 | 26.99 | 108 | 0.98 |
| 526a) | 7.20 | 34.50 | 27.02 | 105 | 600 | 6.46 | 34.52 | 27.14 | 94 | 1.09 |
| 631 | 6.18 | 34.51 | 27.16 | 91 | 700 | 5.75 | 34.55 | 27.25 | 83 | 1.18 |
| 736 | 5.53 | 34.56 | 27.29 | 80 | 800 | 5.19 | 34.57 | 27.33 | 75 | 1.27 |
| 790 | 5.25 | 34.57 | 27.33 | 76 | 1000 | 4.22 | 34.60 | 27.47 | 62 | 1.43 |
| 842 | 4.93 | 34.57 | 27.36 | 72 | 1200 | 3.67 | 34.62 | 27.54 | 56 | 1.57 |
| 896 | 4.66 | 34.58 | 27.40 | 69 | 1500 | 2.92 | 34.64 | 27.63 | 47 | 1.75 |
| 949 | 4.40 | 34.58 | 27.43 | 66 | 2000 | 2.14 | 34.68 | 27.73 | 38 | 2.01 |
| 1003 | 4.21 | 34.61 | 27.48 | 62 | | | | | | |
| 1056 | 4.08 | 34.61 | 27.49 | 60 | | | | | | |
| 1271 | 3.43 | 34.60 | 27.55 | 55 | | | | | | |
| 1597 | 2.73 | 34.65 | 27.65 | 45 | | | | | | |
| 2153 | 2.01 | 34.69 | 27.74 | 36 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

USNEL SHUTTLE

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 12 | USS MARYSVILLE; May 2, 1952; 1755, 1618 GCT; 18°40'N, 106°58'W; sounding, 1100 fm; wind, 020°, force 2; weather, cloudy; sea, moderate; wire angle, 25°, 27°. | | | | | | | | | |
| 0 | 24.10 | 34.71 | 23.41 | 448 | 0 | 24.10 | 34.71 | 23.41 | 448 | 0.00 |
| 10 | 23.91 | 34.74 | 23.49 | 440 | 10 | 23.91 | 34.74 | 23.49 | 440 | 0.04 |
| 24 | 23.55 | 34.73 | 23.59 | 431 | 20 | 23.79 | 34.74 | 23.53 | 437 | 0.09 |
| 49 | 21.54 | 34.69 | 24.13 | 380 | 30 | 23.35 | 34.72 | 23.64 | 426 | 0.13 |
| 72 | 17.84 | 34.67 | 25.08 | 289 | 50 | 21.35 | 34.69 | 24.18 | 375 | 0.21 |
| 97 | 14.80 | 34.60 | 25.73 | 228 | 75 | 17.50 | 34.67 | 25.16 | 281 | 0.29 |
| 145 | 12.59 | 34.71 | 26.27 | 176 | 100 | 14.15 | 34.60 | 25.87 | 214 | 0.36 |
| 195 | 11.84 | 34.78 | 26.47 | 157 | 150 | 12.49 | 34.72 | 26.30 | 173 | 0.46 |
| 293 | 10.62 | 34.69 | 26.62 | 143 | 200 | 11.77 | 34.78 | 26.48 | 156 | 0.54 |
| 394 | 9.35 | 34.63 | 26.79 | 126 | 250 | 11.16 | 34.74 | 26.56 | 148 | 0.62 |
| 497 | 7.42 | 34.51 | 26.99 | 107 | 300 | 10.57 | 34.69 | 26.63 | 142 | 0.69 |
| 602 | 6.48 | 34.54 | 27.15 | 93 | 400 | 9.24 | 34.62 | 26.80 | 125 | 0.84 |
| | | | | | 500 | 7.41 | 34.52 | 27.00 | 106 | 0.96 |
| 459a) | 7.94 | 34.54 | 26.94 | 112 | 600 | 6.50 | 34.49 | 27.11 | 97 | 1.07 |
| 583 | 6.68 | 34.51 | 27.10 | 97 | 700 | 5.89 | 34.47 | 27.17 | 91 | 1.17 |
| 628 | 6.29 | 34.47 | 27.12 | 95 | 800 | 5.28 | 34.48 | 27.25 | 83 | 1.27 |
| 675 | 5.97 | 34.50 | 27.18 | 89 | 1000 | 4.34 | 34.51 | 27.38 | 70 | 1.44 |
| 721 | 5.67 | 34.46 | 27.19 | 89 | 1200 | 3.64 | 34.53 | 27.47 | 62 | 1.59 |
| 767 | 5.46 | 34.47 | 27.22 | 86 | 1500 | 2.92 | 34.54 | 27.55 | 55 | 1.80 |
| 814 | 5.19 | 34.48 | 27.26 | 82 | | | | | | |
| 861 | 4.97 | 34.51 | 27.31 | 77 | | | | | | |
| 908 | 4.76 | 34.51 | 27.34 | 75 | | | | | | |
| 1095 | 3.97 | 34.52 | 27.43 | 66 | | | | | | |
| 1380 | 3.15 | 34.54 | 27.53 | 57 | | | | | | |
| 1873 | 2.30 | 34.56 | 27.62 | 48 | | | | | | |
| 13 | USS MARYSVILLE; May 3, 1952; 1114 GCT; 18°57'N, 104°37'W; sounding, 420 fm; wind, 360°, force 2; weather, cloudy; sea, slight; wire angle, 23°. | | | | | | | | | |
| 0 | 24.37 | 34.61 | 23.26 | 463 | 0 | 24.37 | 34.61 | 23.26 | 463 | 0.00 |
| 25 | 21.94 | 34.71 | 24.03 | 389 | 10 | 23.60 | 34.69 | 23.55 | 435 | 0.04 |
| 50 | 18.95 | 34.66 | 24.79 | 316 | 20 | 22.53 | 34.71 | 23.87 | 404 | 0.09 |
| 74 | 14.82 | 34.69 | 25.79 | 221 | 30 | 21.50 | 34.70 | 24.15 | 378 | 0.13 |
| 98 | 13.45 | 34.81 | 26.17 | 185 | 50 | 18.95 | 34.66 | 24.79 | 316 | 0.20 |
| 147 | 12.37 | 34.81 | 26.39 | 165 | 75 | 14.75 | 34.69 | 25.81 | 220 | 0.26 |
| 194 | 11.84 | 34.81 | 26.49 | 155 | 100 | 13.35 | 34.81 | 26.19 | 183 | 0.31 |
| 388 | 8.99 | 34.63 | 26.85 | 121 | 150 | 12.32 | 34.81 | 26.40 | 164 | 0.40 |
| 584 | 6.69 | 34.58 | 27.15 | 92 | 200 | 11.76 | 34.81 | 26.51 | 154 | 0.48 |
| 634 | 6.27 | 34.53 | 27.17 | 91 | 250 | 11.02 | 34.78 | 26.62 | 143 | 0.56 |
| 683 | 5.95 | 34.54 | 27.22 | 86 | 300 | 10.27 | 34.72 | 26.71 | 135 | 0.63 |
| 734 | 5.74 | 34.55 | 27.25 | 83 | 400 | 8.85 | 34.62 | 26.86 | 120 | 0.77 |
| 783 | 5.64 | 34.53 | 27.25 | 83 | 500 | 7.68 | 34.60 | 27.03 | 104 | 0.89 |
| 834 | 5.38 | 34.55 | 27.30 | 79 | 600 | 6.56 | 34.57 | 27.16 | 91 | 0.99 |
| | | | | | 700 | 5.88 | 34.54 | 27.23 | 85 | 1.09 |
| | | | | | 800 | 5.58 | 34.55 | 27.27 | 81 | 1.18 |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| USS MARYSVILLE; May 6, 1952; 1357, 1415, 1140 GCT; 17°56'N, 107°16'W; sounding, 1700 fm; wind, 340°, force 1; weather, partly cloudy; sea, moderate; wire angle, 10°, missing, 22°. | | | | | | | | | | 14 |
| 0 | 24.43 | 34.72 | 23.32 | 457 | 0 | 24.43 | 34.72 | 23.32 | 457 | 0.00 |
| 10 | 24.42 | 34.74 | 23.34 | 455 | 10 | 24.42 | 34.74 | 23.34 | 455 | 0.05 |
| 25 | 24.41 | 34.74 | 23.34 | 455 | 20 | 24.42 | 34.74 | 23.34 | 455 | 0.09 |
| 50 | 23.18 | 34.73 | 23.70 | 421 | 30 | 24.40 | 34.74 | 23.35 | 454 | 0.14 |
| 74 | 18.78 | 34.61 | 24.80 | 316 | 50 | 23.18 | 34.73 | 23.70 | 421 | 0.22 |
| 98 | 15.51 | 34.61 | 25.58 | 242 | 75 | 18.70 | 34.61 | 24.82 | 314 | 0.32 |
| | | | | | 100 | 15.43 | 34.61 | 25.60 | 240 | 0.39 |
| 147 | 12.79 | 34.74 | 26.25 | 178 | 150 | 12.68 | 34.74 | 26.27 | 176 | 0.49 |
| 196 | 11.87 | 34.74 | 26.43 | 161 | 200 | 11.80 | 34.74 | 26.44 | 159 | 0.58 |
| 295 | 10.74 | 34.71 | 26.62 | 143 | 250 | 11.20 | 34.72 | 26.54 | 150 | 0.66 |
| 395 | 8.93 | 34.60 | 26.84 | 122 | 300 | 10.62 | 34.70 | 26.63 | 142 | 0.73 |
| 495 | 7.76 | 34.55 | 26.98 | 109 | 400 | 8.87 | 34.61 | 26.85 | 121 | 0.87 |
| 597 | 6.71 | 34.51 | 27.09 | 98 | 500 | 7.70 | 34.55 | 26.99 | 108 | 1.00 |
| | | | | | 600 | 6.66 | 34.51 | 27.10 | 97 | 1.11 |
| 456a) | 8.20 | 34.58 | 26.93 | 113 | 700 | 5.71 | 34.51 | 27.22 | 85 | 1.21 |
| 548 | 7.10 | 34.52 | 27.05 | 102 | 800 | 5.19 | 34.51 | 27.29 | 80 | 1.30 |
| 640 | 6.26 | 34.51 | 27.15 | 92 | 1000 | 4.35 | 34.52 | 27.39 | 70 | 1.47 |
| 686 | 5.81 | 34.51 | 27.21 | 87 | 1200 | 3.68 | 34.53 | 27.47 | 62 | 1.62 |
| 732 | 5.52 | 34.51 | 27.25 | 83 | 1500 | 2.91 | 34.56 | 27.56 | 53 | 1.82 |
| 778 | 5.30 | 34.51 | 27.27 | 81 | | | | | | |
| 825 | 5.07 | 34.52 | 27.31 | 77 | | | | | | |
| 871 | 4.84 | 34.54 | 27.35 | 73 | | | | | | |
| 918 | 4.67 | 34.51 | 27.35 | 74 | | | | | | |
| 1104 | 3.97 | 34.52 | 27.43 | 66 | | | | | | |
| 1385 | 3.17 | 34.55 | 27.53 | 56 | | | | | | |
| 1860 | 2.28 | 34.60 | 27.65 | 45 | | | | | | |
| USS MARYSVILLE; May 7, 1952; 0438, 0253 GCT; 17°18'N, 108°56'W; sounding, 2000 fm; wind, 320°, force 2; weather, missing; sea, slight; wire angle, 05°, 03°. | | | | | | | | | | 15 |
| 0 | 26.96 | 34.25 | 22.19 | 565 | 0 | 26.96 | 34.25 | 22.19 | 565 | 0.00 |
| 10 | 26.39 | 34.27 | 22.38 | 546 | 10 | 26.39 | 34.27 | 22.38 | 546 | 0.06 |
| 25 | 25.38 | 34.53 | 22.89 | 498 | 20 | 25.62 | 34.34 | 22.68 | 518 | 0.11 |
| 49 | 22.86 | 34.60 | 23.69 | 421 | 30 | 24.25 | 34.55 | 23.25 | 464 | 0.16 |
| 74 | 18.34 | 34.43 | 24.77 | 318 | 50 | 22.53 | 34.60 | 23.79 | 412 | 0.25 |
| 98 | 14.63 | 34.61 | 25.77 | 223 | 75 | 18.15 | 34.43 | 24.82 | 314 | 0.34 |
| 147 | 12.71 | 34.69 | 26.23 | 180 | 100 | 14.57 | 34.62 | 25.79 | 221 | 0.40 |
| 196 | 11.74 | 34.70 | 26.42 | 161 | 150 | 12.63 | 34.69 | 26.25 | 178 | 0.51 |
| 293 | 10.31 | 34.64 | 26.64 | 141 | 200 | 11.68 | 34.70 | 26.44 | 160 | 0.59 |
| 390 | 8.91 | 34.55 | 26.80 | 126 | 250 | 10.75 | 34.67 | 26.58 | 146 | 0.67 |
| 487 | 7.55 | 34.52 | 26.98 | 108 | 300 | 10.02 | 34.63 | 26.68 | 137 | 0.75 |
| 586 | 6.67 | 34.52 | 27.11 | 97 | 400 | 8.75 | 34.54 | 26.82 | 124 | 0.88 |
| | | | | | 500 | 7.42 | 34.51 | 26.99 | 107 | 1.01 |
| 486a) | 7.50 | 34.51 | 26.98 | 108 | 600 | 6.53 | 34.52 | 27.13 | 95 | 1.12 |
| 583 | 6.54 | 34.51 | 27.12 | 96 | 700 | 5.75 | 34.55 | 27.25 | 83 | 1.21 |
| 680 | 5.89 | 34.56 | 27.24 | 84 | 800 | 5.11 | 34.56 | 27.34 | 75 | 1.30 |
| 729 | 5.56 | 34.55 | 27.27 | 81 | 1000 | 4.34 | 34.54 | 27.41 | 68 | 1.46 |
| 777 | 5.22 | 34.56 | 27.32 | 76 | 1200 | 3.67 | 34.57 | 27.50 | 59 | 1.61 |
| 826 | 5.00 | 34.55 | 27.34 | 74 | 1500 | 2.88 | 34.60 | 27.60 | 50 | 1.81 |
| 875 | 4.79 | 34.56 | 27.37 | 71 | 2000 | (2.02) | (34.63) | (27.70) | (41) | (2.08) |
| 924 | 4.58 | 34.54 | 27.38 | 71 | | | | | | |
| 972 | 4.43 | 34.54 | 27.40 | 69 | | | | | | |
| 1167 | 3.76 | 34.57 | 27.49 | 60 | | | | | | |
| 1461 | 2.96 | 34.60 | 27.59 | 51 | | | | | | |
| 1954 | 2.10 | 34.63 | 27.69 | 41 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| **16** | USS MARYSVILLE; May 7, 1952; 1925, 1802 GCT; 16°38'N, 110°34'W; sounding, 1900 fm; wind, 300°, force 1; weather, cloudy; sea, moderate; wire angle, 15°, 10°. | | | | | | | | | |
| 0 | 25.79 | 34.60 | 22.82 | 505 | 0 | 25.79 | 34.60 | 22.82 | 505 | 0.00 |
| 10 | 25.19 | 34.59 | 23.00 | 488 | 10 | 25.19 | 34.59 | 23.00 | 488 | 0.05 |
| 25 | 25.15 | 34.60 | 23.01 | 486 | 20 | 25.15 | 34.60 | 23.01 | 486 | 0.10 |
| 50 | 24.84 | 34.58 | 23.09 | 478 | 30 | 25.13 | 34.60 | 23.02 | 485 | 0.15 |
| 74 | 22.48 | 34.48 | 23.71 | 420 | 50 | 24.84 | 34.58 | 23.09 | 478 | 0.24 |
| 99 | 16.60 | 34.49 | 25.24 | 274 | 75 | 22.40 | 34.48 | 23.73 | 418 | 0.36 |
| 149 | 12.79 | 34.72 | 26.24 | 179 | 100 | 16.45 | 34.49 | 25.27 | 271 | 0.44 |
| 199 | 11.88 | 34.75 | 26.44 | 160 | 150 | 12.77 | 34.72 | 26.24 | 179 | 0.56 |
| 299 | 10.60 | 34.75 | 26.67 | 138 | 200 | 11.86 | 34.75 | 26.44 | 160 | 0.64 |
| 399 | 9.16 | 34.61 | 26.81 | 125 | 250 | 11.23 | 34.75 | 26.56 | 149 | 0.72 |
| 499 | 7.81 | 34.56 | 26.98 | 109 | 300 | 10.57 | 34.75 | 26.68 | 137 | 0.80 |
| 602 | 6.65 | 34.53 | 27.12 | 96 | 400 | 9.14 | 34.61 | 26.81 | 125 | 0.94 |
| | | | | | 500 | 7.79 | 34.55 | 26.97 | 109 | 1.06 |
| 494a) | 7.61 | 34.55 | 27.00 | 107 | 600 | 6.66 | 34.53 | 27.12 | 96 | 1.17 |
| 592 | 6.74 | 34.52 | 27.10 | 97 | 700 | 5.88 | 34.51 | 27.20 | 88 | 1.27 |
| 689 | 5.95 | 34.51 | 27.19 | 88 | 800 | 5.29 | 34.55 | 27.31 | 78 | 1.37 |
| 739 | 5.68 | 34.52 | 27.24 | 84 | 1000 | 4.31 | 34.57 | 27.43 | 66 | 1.53 |
| 787 | 5.38 | 34.54 | 27.29 | 79 | 1200 | 3.66 | 34.60 | 27.52 | 57 | 1.67 |
| 836 | 5.05 | 34.58 | 27.36 | 73 | 1500 | 2.94 | 34.60 | 27.59 | 50 | 1.86 |
| 885 | 4.84 | 34.58 | 27.38 | 70 | 2000 | (2.14) | (34.61) | (27.67) | (43) | (2.14) |
| 934 | 4.59 | 34.58 | 27.41 | 68 | | | | | | |
| 982 | 4.39 | 34.57 | 27.42 | 66 | | | | | | |
| 1178 | 3.71 | 34.60 | 27.52 | 57 | | | | | | |
| 1473 | 2.98 | 34.60 | 27.59 | 51 | | | | | | |
| 1976 | 2.18 | 34.61 | 27.67 | 44 | | | | | | |
| **17** | USS MARYSVILLE; May 8, 1952; 2100, 2119, 1913 GCT; 16°01'N, 111°52'W; sounding, 1580 fm; wind, 350°, force 2; weather, partly cloudy; sea, moderate; wire angle, 25°, 35°, 25°. | | | | | | | | | |
| 0 | 26.59 | 34.08 | 22.18 | 566 | 0 | 26.59 | 34.08 | 22.18 | 566 | 0.00 |
| 10 | 26.21 | 34.05 | 22.27 | 557 | 10 | 26.21 | 34.05 | 22.27 | 557 | 0.06 |
| 24 | 25.31 | 34.11 | 22.60 | 526 | 20 | 25.61 | 34.09 | 22.49 | 536 | 0.11 |
| 48 | 23.22 | 34.41 | 23.44 | 445 | 30 | 24.81 | 34.20 | 22.82 | 505 | 0.16 |
| 71 | 19.53 | 34.19 | 24.29 | 365 | 50 | 23.05 | 34.41 | 23.49 | 440 | 0.26 |
| 95 | 15.22 | 34.12 | 25.27 | 271 | 75 | 18.93 | 34.17 | 24.42 | 351 | 0.36 |
| | | | | | 100 | 14.65 | 34.20 | 25.45 | 254 | 0.43 |
| 140 | 12.76 | 34.67 | 26.20 | 182 | 150 | 12.57 | 34.69 | 26.26 | 177 | 0.54 |
| 186 | 12.01 | 34.71 | 26.38 | 165 | 200 | 11.81 | 34.71 | 26.42 | 162 | 0.63 |
| 278 | 10.52 | 34.66 | 26.62 | 143 | 250 | 10.99 | 34.69 | 26.56 | 149 | 0.71 |
| 373 | 9.18 | 34.55 | 26.76 | 130 | 300 | 10.21 | 34.63 | 26.65 | 140 | 0.79 |
| 474 | 7.97 | 34.56 | 26.95 | 111 | 400 | 8.83 | 34.55 | 26.81 | 124 | 0.93 |
| 579 | 6.81 | 34.56 | 27.12 | 95 | 500 | 7.65 | 34.56 | 27.00 | 107 | 1.05 |
| | | | | | 600 | 6.58 | 34.58 | 27.17 | 91 | 1.16 |
| 626 | 6.34 | 34.58 | 27.20 | 88 | 700 | 5.73 | 34.58 | 27.28 | 80 | 1.25 |
| 732 | 5.50 | 34.57 | 27.30 | 79 | 800 | 5.13 | 34.57 | 27.34 | 74 | 1.34 |
| 784 | 5.21 | 34.57 | 27.33 | 75 | 1000 | 4.27 | 34.57 | 27.44 | 65 | 1.50 |
| 837 | 4.99 | 34.56 | 27.35 | 74 | 1200 | 3.71 | 34.57 | 27.50 | 60 | 1.64 |
| 891 | 4.66 | 34.58 | 27.40 | 69 | 1500 | 2.93 | 34.59 | 27.59 | 51 | 1.84 |
| 945 | 4.48 | 34.58 | 27.42 | 67 | 2000 | 2.12 | 34.62 | 27.68 | 42 | 2.12 |
| 997 | 4.28 | 34.57 | 27.44 | 65 | | | | | | |
| 1051 | 4.14 | 34.57 | 27.45 | 64 | | | | | | |
| 1269 | 3.44 | 34.58 | 27.53 | 56 | | | | | | |
| 1598 | 2.72 | 34.60 | 27.61 | 49 | | | | | | |
| 2154 | 1.90 | 34.62 | 27.70 | 41 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

USS MARYSVILLE; May 9, 1952; 0243, 0305, 0124 GCT; 16°00'N, 112°01'W; sounding, 890 fm; wind, 360°, force 2; weather, partly cloudy; sea, rough; wire angle, 05°, 10°, 25°. 18

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.35 | 34.02 | 22.21 | 563 | 0 | 26.35 | 34.02 | 22.21 | 563 | 0.00 |
| 16 | 25.57 | 34.12 | 22.52 | 533 | 10 | 26.35 | 34.08 | 22.25 | 559 | 0.06 |
| 33 | 24.29 | 34.32 | 23.06 | 481 | 20 | 25.24 | 34.19 | 22.68 | 518 | 0.11 |
| 61 | 21.25 | 34.34 | 23.94 | 397 | 30 | 24.45 | 34.31 | 23.01 | 487 | 0.16 |
| 90 | 15.48 | 34.13 | 25.22 | 276 | 50 | 22.70 | 34.34 | 23.54 | 436 | 0.25 |
| 118 | 13.40 | 34.51 | 25.95 | 206 | 75 | 18.35 | 34.22 | 24.61 | 334 | 0.35 |
| 173 | 12.23 | 34.70 | 26.33 | 170 | 100 | 14.18 | 34.25 | 25.59 | 241 | 0.42 |
| | | | | | 150 | 12.72 | 34.67 | 26.21 | 181 | 0.53 |
| 229 | 11.24 | 34.68 | 26.50 | 154 | 200 | 11.74 | 34.69 | 26.42 | 162 | 0.62 |
| 341 | 9.56 | 34.63 | 26.76 | 130 | 250 | 10.95 | 34.67 | 26.55 | 150 | 0.70 |
| 453 | 7.99 | 34.54 | 26.93 | 113 | 300 | 10.22 | 34.65 | 26.66 | 139 | 0.77 |
| 567 | 6.90 | 34.49 | 27.05 | 102 | 400 | 8.61 | 34.58 | 26.87 | 119 | 0.91 |
| 680 | 5.98 | 34.50 | 27.18 | 89 | 500 | 7.66 | 34.52 | 26.97 | 110 | 1.03 |
| | | | | | 600 | 6.60 | 34.51 | 27.11 | 96 | 1.14 |
| 543a) | 7.32 | 34.52 | 27.02 | 105 | 700 | 5.84 | 34.50 | 27.20 | 88 | 1.24 |
| 651 | 6.17 | 34.51 | 27.17 | 91 | 800 | 5.24 | 34.50 | 27.27 | 81 | 1.34 |
| 759 | 5.44 | 34.51 | 27.26 | 82 | 1000 | 4.27 | 34.51 | 27.39 | 70 | 1.51 |
| 813 | 5.18 | 34.50 | 27.28 | 80 | 1200 | 3.64 | 34.50 | 27.45 | 64 | 1.66 |
| 869 | 4.85 | 34.52 | 27.33 | 75 | 1500 | 3.02 | 34.52 | 27.52 | 57 | 1.87 |
| 924 | 4.65 | 34.54 | 27.37 | 71 | | | | | | |
| 978 | 4.34 | 34.50 | 27.37 | 71 | | | | | | |
| 1033 | 4.16 | 34.51 | 27.40 | 69 | | | | | | |
| 1087 | 4.00 | 34.51 | 27.42 | 67 | | | | | | |
| 1309 | 3.33 | 34.49 | 27.47 | 62 | | | | | | |
| 1532 | 2.98 | 34.52 | 27.53 | 57 | | | | | | |

USS MARYSVILLE; May 9, 1952; 0455 GCT; 16°00'N, 112°06'W; sounding, 755 fm; wind, 340°, force 3; weather, partly cloudy; sea, missing; wire angle, 00°. 19

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.25 | 34.06 | 22.27 | 557 | 0 | 26.25 | 34.06 | 22.27 | 557 | 0.00 |
| 50 | 22.54 | 34.37 | 23.61 | 429 | 10 | (26.25) | (34.12) | (22.31) | (553) | (0.06) |
| 99 | 15.21 | 34.20 | 25.33 | 265 | 20 | (26.05) | (34.21) | (22.44) | (541) | (0.11) |
| 292 | 10.21 | 34.66 | 26.67 | 138 | 30 | (24.96) | (34.31) | (22.85) | (501) | (0.16) |
| 485 | 7.51 | 34.58 | 27.04 | 103 | 50 | 22.54 | 34.37 | 23.61 | 429 | 0.26 |
| 677 | 5.83 | 34.49 | 27.19 | 88 | 75 | 17.98 | 34.30 | 24.76 | 319 | 0.35 |
| 725 | 5.57 | 34.48 | 27.22 | 86 | 100 | 15.14 | 34.20 | 25.34 | 264 | 0.42 |
| 773 | 5.30 | 34.48 | 27.25 | 83 | 150 | (12.79) | (34.34) | (25.94) | (207) | (0.54) |
| 821 | 5.01 | 34.49 | 27.29 | 79 | 200 | (11.68) | (34.49) | (26.27) | (176) | (0.64) |
| 870 | 4.85 | 34.50 | 27.32 | 77 | 250 | (10.88) | (34.63) | (26.53) | (151) | (0.73) |
| 967 | 4.35 | 34.51 | 27.38 | 71 | 300 | 10.14 | 34.66 | 26.68 | 137 | (0.80) |
| 1065 | 3.96 | 34.52 | 27.43 | 66 | 400 | 8.57 | 34.63 | 26.92 | 115 | (0.93) |
| 1114 | 3.80 | 34.54 | 27.46 | 63 | 500 | 7.33 | 34.57 | 27.05 | 101 | (1.05) |
| 1164 | 3.72 | 34.53 | 27.46 | 63 | 600 | 6.32 | 34.52 | 27.15 | 92 | (1.15) |
| | | | | | 700 | 5.69 | 34.48 | 27.20 | 88 | (1.25) |
| | | | | | 800 | 5.15 | 34.48 | 27.27 | 81 | (1.35) |
| | | | | | 1000 | 4.21 | 34.51 | 27.40 | 69 | (1.52) |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| **20** | USS MARYSVILLE; May 9, 1952; 0831, 0658 GCT; 16°00'N, 112°10'W; sounding, 1420 fm; wind, 340°, force 3; weather, partly cloudy; sea, missing; wire angle, 17°, 20°. | | | | | | | | | |
| 0 | 26.03 | 34.14 | 22.40 | 545 | 0 | 26.03 | 34.14 | 22.40 | 545 | 0.00 |
| 14 | 25.72 | 34.21 | 22.55 | 531 | 10 | 26.03 | 34.20 | 22.44 | 541 | 0.05 |
| 29 | 24.60 | 34.33 | 22.98 | 490 | 20 | 25.70 | 34.28 | 22.61 | 525 | 0.11 |
| 54 | 21.55 | 34.38 | 23.89 | 402 | 30 | 24.45 | 34.34 | 23.03 | 485 | 0.16 |
| 78 | 16.92 | 34.13 | 24.89 | 308 | 50 | 22.05 | 34.38 | 23.75 | 415 | 0.25 |
| 103 | 14.28 | 34.29 | 25.60 | 240 | 75 | 17.60 | 34.13 | 24.72 | 323 | 0.34 |
| 152 | 12.57 | 34.74 | 26.30 | 174 | 100 | 14.50 | 34.24 | 25.51 | 248 | 0.41 |
| 200 | 11.57 | 34.76 | 26.50 | 154 | 150 | 12.62 | 34.74 | 26.29 | 174 | 0.52 |
| 299 | 10.14 | 34.66 | 26.68 | 137 | 200 | 11.57 | 34.76 | 26.50 | 154 | 0.60 |
| 399 | 8.85 | 34.61 | 26.86 | 120 | 250 | 10.81 | 34.72 | 26.61 | 144 | 0.68 |
| 500 | 7.59 | 34.55 | 27.00 | 107 | 300 | 10.12 | 34.66 | 26.69 | 136 | 0.75 |
| 603 | 6.59 | 34.53 | 27.13 | 95 | 400 | 8.83 | 34.61 | 26.86 | 120 | 0.89 |
| | | | | | 500 | 7.59 | 34.55 | 27.00 | 107 | 1.01 |
| 509a) | 7.51 | 34.56 | 27.02 | 105 | 600 | 6.59 | 34.53 | 27.13 | 95 | 1.12 |
| 616 | 6.43 | 34.52 | 27.14 | 93 | 700 | 5.82 | 34.54 | 27.23 | 85 | 1.22 |
| 720 | 5.67 | 34.55 | 27.26 | 82 | 800 | 5.21 | 34.54 | 27.31 | 78 | 1.31 |
| 772 | 5.39 | 34.53 | 27.28 | 80 | 1000 | 4.27 | 34.56 | 27.43 | 66 | 1.47 |
| 823 | 5.04 | 34.52 | 27.31 | 77 | 1200 | 3.57 | 34.57 | 27.51 | 58 | 1.62 |
| 875 | 4.70 | 34.55 | 27.37 | 71 | 1500 | 2.85 | 34.60 | 27.60 | 50 | 1.81 |
| 927 | 4.50 | 34.55 | 27.40 | 69 | 2000 | 2.06 | 34.65 | 27.71 | 40 | 2.08 |
| 979 | 4.36 | 34.57 | 27.43 | 66 | | | | | | |
| 1032 | 4.10 | 34.57 | 27.46 | 63 | | | | | | |
| 1240 | 3.45 | 34.57 | 27.52 | 57 | | | | | | |
| 1555 | 2.73 | 34.61 | 27.62 | 48 | | | | | | |
| 2085 | 1.98 | 34.65 | 27.71 | 39 | | | | | | |
| **21** | USS MARYSVILLE; May 9, 1952; 1244, 1048 GCT; 16°00'N, 112°18'W; sounding, 1850 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 17°, 10°. | | | | | | | | | |
| 0 | 25.94 | 34.21 | 22.48 | 537 | 0 | 25.94 | 34.21 | 22.48 | 537 | 0.00 |
| 10 | 25.97 | 34.23 | 22.48 | 537 | 10 | 25.97 | 34.23 | 22.48 | 537 | 0.05 |
| 24 | 25.20 | 34.28 | 22.76 | 510 | 20 | 25.75 | 34.27 | 22.58 | 527 | 0.11 |
| 49 | 22.98 | 34.38 | 23.49 | 441 | 30 | 24.83 | 34.31 | 22.89 | 498 | 0.16 |
| 72 | 18.87 | 34.08 | 24.37 | 357 | 50 | 22.60 | 34.38 | 23.60 | 430 | 0.25 |
| 95 | 15.08 | 34.23 | 25.38 | 260 | 75 | 18.50 | 34.08 | 24.46 | 348 | 0.35 |
| 143 | 12.89 | 34.70 | 26.20 | 182 | 100 | 14.55 | 34.33 | 25.57 | 242 | 0.42 |
| 192 | 12.00 | 34.79 | 26.44 | 159 | 150 | 12.74 | 34.72 | 26.25 | 178 | 0.53 |
| 288 | 10.38 | - | | | 200 | 11.88 | 34.79 | 26.47 | 157 | 0.62 |
| 386 | 8.88 | - | | | 250 | 11.03 | | 26.33 | | 1.35 |
| 485 | 7.63 | - | | | 300 | 10.21 | | 26.25 | | 2.73 |
| 586 | 6.59 | - | | | 400 | 8.69 | | 26.13 | | 5.47 |
| | | | | | 500 | 7.48 | | 26.06 | | 8.20 |
| 704 | 5.67 | 34.54 | 27.25 | 83 | 600 | 6.47 | | 26.01 | | |
| 807 | 5.04 | 34.56 | 27.34 | 74 | 700 | 5.70 | (34.54) | (27.25) | (83) | |
| 859 | 4.82 | 34.56 | 27.37 | 72 | 800 | 5.07 | 34.55 | 27.33 | 75 | |
| 911 | 4.61 | 34.56 | 27.39 | 69 | 1000 | 4.33 | 34.56 | 27.42 | 67 | |
| 962 | 4.46 | 34.56 | 27.41 | 68 | 1200 | 3.69 | 34.59 | 27.51 | 58 | |
| 1014 | 4.26 | 34.56 | 27.43 | 66 | 1500 | 2.93 | 34.61 | 27.60 | 50 | |
| 1065 | 4.07 | 34.57 | 27.46 | 63 | 2000 | 2.10 | 34.65 | 27.71 | 40 | |
| 1117 | 3.94 | 34.59 | 27.49 | 60 | 2500 | 1.81 | 34.69 | 27.76 | 35 | |
| 1324 | 3.37 | 34.61 | 27.56 | 54 | | | | | | |
| 1634 | 2.65 | 34.62 | 27.64 | 46 | | | | | | |
| 2155 | 1.94 | 34.67 | 27.73 | 37 | | | | | | |
| 2679 | 1.75 | 34.70 | 27.77 | 33 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| USS MARYSVILLE; May 9, 1952; 1817, 1641 GCT; 16°04.5'N, 112°05.5'W; sounding, 1410 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 32°, 25°. | | | | | | | | | | 22 |
| 0 | 26.24 | 34.10 | 22.30 | 554 | 0 | 26.24 | 34.10 | 22.30 | 554 | 0.00 |
| 9 | 25.96 | 34.14 | 22.42 | 543 | 10 | 25.94 | 34.14 | 22.43 | 542 | 0.05 |
| 26 | 24.51 | 34.40 | 23.06 | 482 | 20 | 25.13 | 34.27 | 22.77 | 509 | 0.11 |
| 48 | 23.11 | 34.42 | 23.48 | 441 | 30 | 24.47 | 34.41 | 23.08 | 480 | 0.16 |
| 70 | 18.74 | 34.13 | 24.44 | 350 | 50 | 22.85 | 34.42 | 23.56 | 434 | 0.25 |
| 93 | 15.82 | 34.29 | 25.26 | 272 | 75 | 18.15 | 34.13 | 24.59 | 336 | 0.35 |
| 140 | 13.11 | 34.67 | 26.13 | 189 | 100 | 15.30 | 34.39 | 25.45 | 253 | 0.42 |
| 187 | 12.03 | 34.80 | 26.45 | 159 | 150 | 12.81 | 34.72 | 26.23 | 179 | 0.53 |
| 280 | 10.45 | 34.70 | 26.66 | 139 | 200 | 11.82 | 34.80 | 26.49 | 155 | 0.62 |
| 376 | 9.26 | 34.62 | 26.80 | 126 | 250 | 10.94 | 34.74 | 26.60 | 144 | 0.69 |
| 476 | 7.86 | 34.59 | 26.99 | 107 | 300 | 10.20 | 34.68 | 26.69 | 136 | 0.77 |
| 578 | 6.73 | 34.57 | 27.14 | 94 | 400 | 8.96 | 34.61 | 26.84 | 122 | 0.90 |
| | | | | | 500 | 7.52 | 34.58 | 27.04 | 103 | 1.02 |
| 491a) | 7.56 | 34.58 | 27.03 | 104 | 600 | 6.48 | 34.56 | 27.16 | 91 | 1.13 |
| 594 | 6.49 | 34.56 | 27.16 | 91 | 700 | 5.71 | 34.55 | 27.26 | 82 | 1.22 |
| 696 | 5.73 | 34.55 | 27.25 | 83 | 800 | 5.13 | 34.55 | 27.33 | 76 | 1.31 |
| 747 | 5.40 | 34.54 | 27.29 | 80 | 1000 | 4.24 | 34.59 | 27.46 | 63 | 1.47 |
| 798 | 5.15 | 34.55 | 27.32 | 76 | 1200 | 3.56 | 34.61 | 27.54 | 55 | 1.61 |
| 849 | 4.91 | 34.54 | 27.34 | 74 | 1500 | 2.85 | 34.65 | 27.64 | 46 | 1.79 |
| 900 | 4.63 | 34.56 | 27.39 | 70 | 2000 | 2.10 | 34.69 | 27.74 | 37 | 2.04 |
| 951 | 4.44 | 34.73u | | | | | | | | |
| 1003 | 4.22 | 34.60 | 27.47 | 62 | | | | | | |
| 1208 | 3.54 | 34.61 | 27.54 | 55 | | | | | | |
| 1520 | 2.82 | 34.61 | 27.61 | 49 | | | | | | |
| 2053 | 2.04 | 34.70 | 27.75 | 36 | | | | | | |
| USS MARYSVILLE; May 10, 1952; 2135, 2016 GCT; 15°57'N, 112°03.5'W; sounding, 1555 fm; wind, 290°, force 3; weather, partly cloudy; sea, very rough; wire angle, 20°, 25°. | | | | | | | | | | 23 |
| 0 | 26.19 | 34.15 | 22.36 | 549 | 0 | 26.19 | 34.15 | 22.36 | 549 | 0.00 |
| 11 | 26.02 | 34.14 | 22.40 | 545 | 10 | 26.02 | 34.14 | 22.40 | 545 | 0.05 |
| 26 | 25.66 | 34.36 | 22.68 | 518 | 20 | 26.00 | 34.28 | 22.51 | 534 | 0.11 |
| 52 | 23.02 | 34.40 | 23.49 | 440 | 30 | 25.55 | 34.37 | 22.72 | 514 | 0.16 |
| 81 | 16.30 | 34.00 | 24.93 | 303 | 50 | 23.50 | 34.40 | 23.36 | 453 | 0.26 |
| 105 | 13.61 | 34.37 | 25.80 | 221 | 75 | 18.35 | 34.05 | 24.48 | 346 | 0.36 |
| 156 | 12.43 | 34.77 | 26.35 | 169 | 100 | 14.24 | 34.26 | 25.58 | 241 | 0.43 |
| 209 | 11.55 | 34.77 | 26.51 | 153 | 150 | 12.56 | 34.75 | 26.31 | 173 | 0.54 |
| 315 | 9.99 | 34.67 | 26.72 | 134 | 200 | 11.74 | 34.77 | 26.48 | 156 | 0.62 |
| 422 | 8.61 | 34.60 | 26.89 | 117 | 250 | 10.95 | 34.73 | 26.59 | 145 | 0.70 |
| 532 | 7.21 | 34.61 | 27.10 | 97 | 300 | 10.22 | 34.68 | 26.68 | 137 | 0.77 |
| 642 | 6.18 | 34.55 | 27.20 | 88 | 400 | 8.94 | 34.61 | 26.84 | 122 | 0.91 |
| | | | | | 500 | 7.58 | 34.60 | 27.04 | 103 | 1.03 |
| 526a) | 7.27 | 34.59 | 27.08 | 99 | 600 | 6.61 | 34.57 | 27.15 | 92 | 1.14 |
| 634 | 6.35 | 34.54 | 27.17 | 91 | 700 | 5.84 | 34.54 | 27.23 | 85 | 1.23 |
| 741 | 5.54 | 34.56 | 27.28 | 80 | 800 | 5.12 | 34.55 | 27.33 | 76 | 1.32 |
| 796 | 5.16 | 34.54 | 27.31 | 77 | 1000 | 4.26 | 34.56 | 27.43 | 66 | 1.48 |
| 849 | 4.80 | 34.54 | 27.36 | 73 | 1200 | 3.66 | 34.59 | 27.52 | 58 | 1.63 |
| 903 | 4.56 | 34.55 | 27.39 | 70 | 1500 | 2.85 | 34.62 | 27.62 | 48 | 1.82 |
| 958 | 4.34 | 34.56 | 27.42 | 67 | 2000 | 2.05 | 34.67 | 27.73 | 38 | 2.08 |
| 1013 | 4.21 | 34.56 | 27.44 | 65 | | | | | | |
| 1066 | 4.03 | 34.57 | 27.46 | 63 | | | | | | |
| 1285 | 3.42 | 34.60 | 27.55 | 55 | | | | | | |
| 1615 | 2.61 | 34.64 | 27.65 | 45 | | | | | | |
| 2176 | 1.92 | 34.69 | 27.75 | 35 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

USNEL SHUTTLE

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 24 | USS MARYSVILLE; May 11, 1952; 0354, 0220 GCT; 15°54'N, 112°08'W; sounding, 2080 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 25°, 40°. | | | | | | | | | |
| 0 | 25.80 | 34.24 | 22.54 | 531 | 0 | 25.80 | 34.24 | 22.54 | 531 | 0.00 |
| 10 | 25.83 | 34.25 | 22.54 | 531 | 10 | 25.83 | 34.25 | 22.54 | 531 | 0.05 |
| 28 | 25.57 | 34.70 | 22.96 | 491 | 20 | 25.77 | 34.50 | 22.75 | 511 | 0.11 |
| 58 | 21.26 | 34.33 | 23.93 | 398 | 30 | 25.45 | 34.70 | 23.00 | 488 | 0.16 |
| 86 | 15.27 | 34.02 | 25.18 | 280 | 50 | 22.55 | 34.44 | 23.66 | 425 | 0.25 |
| 114 | 13.48 | 34.58 | 25.99 | 203 | 75 | 16.90 | 34.09 | 24.86 | 310 | 0.34 |
| 171 | 12.15 | 34.79 | 26.42 | 162 | 100 | 14.04 | 34.23 | 25.60 | 239 | 0.41 |
| 227 | 11.41 | 34.79 | 26.56 | 149 | 150 | 12.55 | 34.75 | 26.31 | 172 | 0.51 |
| 336 | 9.78 | 34.70 | 26.77 | 128 | 200 | 11.80 | 34.79 | 26.48 | 156 | 0.60 |
| 455 | 7.98 | 34.58 | 26.97 | 110 | 250 | 11.04 | 34.78 | 26.62 | 143 | 0.67 |
| 574 | 6.91 | 34.60 | 27.14 | 94 | 300 | 10.33 | 34.74 | 26.71 | 134 | 0.75 |
| 699 | 5.80 | 34.54 | 27.24 | 84 | 400 | 8.68 | 34.62 | 26.89 | 117 | 0.88 |
| | | | | | 500 | 7.59 | 34.57 | 27.02 | 105 | 1.00 |
| 508a) | 7.51 | 34.57 | 27.03 | 104 | 600 | 6.60 | 34.56 | 27.15 | 93 | 1.11 |
| 607 | 6.50 | 34.56 | 27.16 | 91 | 700 | 5.77 | 34.54 | 27.24 | 84 | 1.20 |
| 709 | 5.71 | 34.55 | 27.26 | 82 | 800 | 5.21 | 34.55 | 27.32 | 77 | 1.29 |
| 761 | 5.39 | 34.57 | 27.31 | 77 | 1000 | 4.22 | 34.58 | 27.45 | 64 | 1.45 |
| 812 | 5.14 | 34.55 | 27.32 | 76 | 1200 | 3.55 | 34.60 | 27.54 | 56 | 1.59 |
| 862 | 4.79 | 34.56 | 27.37 | 71 | 1500 | 2.84 | 34.63 | 27.63 | 47 | 1.78 |
| 914 | 4.50 | 34.58 | 27.42 | 67 | 2000 | 2.10 | 34.68 | 27.73 | 38 | 2.04 |
| 964 | 4.33 | 34.58 | 27.44 | 65 | | | | | | |
| 1016 | 4.18 | 34.58 | 27.46 | 64 | | | | | | |
| 1225 | 3.47 | 34.61 | 27.55 | 54 | | | | | | |
| 1566 | 2.72 | 34.63 | 27.64 | 46 | | | | | | |
| 2157 | 1.93 | 34.69 | 27.75 | 36 | | | | | | |
| 25 | USS MARYSVILLE; May 11, 1952; 1804, 1643 GCT; 14°15'N, 111°20'W; sounding, 1930 fm; wind, 350°, force 3; weather, partly cloudy; sea, rough; wire angle, 27°, 30°. | | | | | | | | | |
| 0 | 27.25 | 34.09 | 21.98 | 585 | 0 | 27.25 | 34.09 | 21.98 | 585 | 0.00 |
| 10 | 27.25 | 34.10 | 21.98 | 585 | 10 | 27.25 | 34.10 | 21.98 | 585 | 0.06 |
| 26 | 27.23 | 34.11 | 22.00 | 583 | 20 | 27.24 | 34.10 | 21.99 | 584 | 0.12 |
| 52 | 24.93 | 34.27 | 22.83 | 503 | 30 | 27.23 | 34.12 | 22.00 | 583 | 0.18 |
| 78 | 22.90 | 34.36 | 23.50 | 440 | 50 | 25.30 | 34.25 | 22.71 | 516 | 0.29 |
| 104 | 18.69 | 34.23 | 24.53 | 341 | 75 | 23.13 | 34.36 | 23.43 | 446 | 0.41 |
| 154 | 13.00 | 34.74 | 26.21 | 182 | 100 | 19.42 | 34.24 | 24.35 | 358 | 0.51 |
| 205 | 11.94 | 34.78 | 26.45 | 159 | 150 | 13.25 | 34.73 | 26.15 | 187 | 0.65 |
| 305 | 10.38 | 34.69 | 26.66 | 139 | 200 | 12.07 | 34.78 | 26.42 | 161 | 0.74 |
| 410 | 9.02 | 34.61 | 26.83 | 123 | 250 | 11.26 | 34.75 | 26.55 | 149 | 0.82 |
| 517 | 7.68 | 34.56 | 27.00 | 107 | 300 | 10.48 | 34.70 | 26.65 | 139 | 0.89 |
| 628 | 6.46 | 34.52 | 27.14 | 94 | 400 | 9.14 | 34.63 | 26.83 | 123 | 1.03 |
| | | | | | 500 | 7.88 | 34.57 | 26.97 | 109 | 1.15 |
| 457a) | 8.42 | 34.60 | 26.92 | 115 | 600 | 6.94 | 34.53 | 27.08 | 99 | 1.27 |
| 546 | 7.51 | 34.55 | 27.01 | 105 | 700 | 6.02 | 34.53 | 27.20 | 88 | 1.37 |
| 635 | 6.61 | 34.54 | 27.13 | 94 | 800 | 5.36 | 34.54 | 27.29 | 79 | 1.46 |
| 679 | 6.17 | 34.52 | 27.17 | 90 | 1000 | 4.42 | 34.56 | 27.41 | 67 | 1.63 |
| 723 | 5.83 | 34.55 | 27.24 | 84 | 1200 | 3.73 | 34.59 | 27.51 | 58 | 1.78 |
| 768 | 5.52 | 34.52 | 27.25 | 83 | 1500 | 2.97 | 34.61 | 27.60 | 50 | 1.97 |
| 813 | 5.36 | 34.55 | 27.30 | 78 | | | | | | |
| 858 | 5.08 | 34.55 | 27.33 | 75 | | | | | | |
| 903 | 4.83 | 34.56 | 27.37 | 72 | | | | | | |
| 1086 | 4.07 | 34.58 | 27.47 | 62 | | | | | | |
| 1374 | 3.24 | 34.60 | 27.57 | 53 | | | | | | |
| 1863 | 2.31 | 34.64 | 27.68 | 42 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| USS MARYSVILLE; May 12, 1952; 1315, 1333, 1150 GCT; 12°19'N, 110°16'W; sounding, 1920 fm; wind, 350°, force 3; weather, partly cloudy; sea, rough; wire angle, 30°, 35°, 35°. | | | | | | | | | | 26 |
| 0 | 28.10 | 33.89 | 21.55 | 626 | 0 | 28.10 | 33.89 | 21.55 | 626 | 0.00 |
| 11 | 28.16 | 33.87 | 21.52 | 629 | 10 | 28.16 | 33.87 | 21.52 | 629 | 0.06 |
| 25 | 28.15 | 33.87 | 21.52 | 629 | 20 | 28.16 | 33.87 | 21.52 | 629 | 0.13 |
| 50 | 27.72 | 33.99 | 21.75 | 607 | 30 | 28.15 | 33.88 | 21.53 | 628 | 0.19 |
| 75 | 27.09 | 34.10 | 22.03 | 580 | 50 | 27.72 | 33.99 | 21.75 | 607 | 0.31 |
| 101 | - | 34.40 | | | 75 | 27.09 | 34.10 | 22.03 | 580 | 0.46 |
| 149 | 13.37 | 34.85 | 26.22 | 181 | 100 | 21.90 | 34.37 | 23.79 | 412 | 0.59 |
| | | | | | 150 | 13.32 | 34.85 | 26.23 | 180 | 0.74 |
| 197 | 12.26 | 34.84 | 26.43 | 160 | 200 | 12.20 | 34.84 | 26.45 | 159 | 0.82 |
| 277 | 11.13 | 34.77 | 26.59 | 145 | 250 | 11.48 | 34.80 | 26.55 | 149 | 0.90 |
| 380 | 10.12 | 34.70 | 26.72 | 134 | 300 | 10.90 | 34.75 | 26.62 | 143 | 0.98 |
| 487 | 8.49 | 34.64 | 26.94 | 113 | 400 | 9.87 | 34.69 | 26.75 | 130 | 1.12 |
| 594 | 7.24 | 34.56 | 27.06 | 101 | 500 | 8.36 | 34.64 | 26.96 | 111 | 1.25 |
| | | | | | 600 | 7.18 | 34.56 | 27.07 | 100 | 1.37 |
| 493a) | 8.48 | 34.66 | 26.95 | 111 | 700 | 6.18 | 34.56 | 27.20 | 87 | 1.47 |
| 594 | 7.23 | 34.58 | 27.08 | 99 | 800 | 5.60 | 34.56 | 27.28 | 80 | 1.57 |
| 696 | 6.20 | 34.56 | 27.20 | 88 | 1000 | 4.51 | 34.58 | 27.42 | 67 | 1.73 |
| 748 | 5.85 | 34.56 | 27.25 | 83 | 1200 | 3.87 | 34.60 | 27.50 | 59 | 1.88 |
| 799 | 5.60 | 34.56 | 27.28 | 80 | 1500 | 3.04 | 34.62 | 27.60 | 50 | 2.07 |
| 849 | 5.23 | 34.56 | 27.32 | 76 | 2000 | 2.17 | 34.66 | 27.71 | 40 | 2.35 |
| 902 | 4.94 | 34.56 | 27.36 | 73 | | | | | | |
| 953 | 4.70 | 34.56 | 27.38 | 70 | | | | | | |
| 1005 | 4.49 | 34.58 | 27.42 | 67 | | | | | | |
| 1214 | 3.82 | 34.60 | 27.51 | 58 | | | | | | |
| 1533 | 2.97 | 34.63 | 27.61 | 48 | | | | | | |
| 2076 | 2.11 | 34.67 | 27.72 | 38 | | | | | | |
| USS MARYSVILLE; May 13, 1952; 0626, 0308 GCT; 10°34'N, 109°36'W; sounding, 1910 fm; wind, calm; weather, partly cloudy; sea, missing; wire angle, missing, 15°. | | | | | | | | | | 27 |
| 0 | 29.10 | 33.96 | 21.27 | 653 | 0 | 29.10 | 33.96 | 21.27 | 653 | 0.00 |
| 10 | 28.79 | 33.95 | 21.37 | 644 | 10 | 28.79 | 33.95 | 21.37 | 644 | 0.06 |
| 25 | 28.67 | 33.96 | 21.41 | 639 | 20 | 28.71 | 33.96 | 21.40 | 640 | 0.13 |
| 51 | 28.41 | 34.00 | 21.53 | 628 | 30 | 28.64 | 33.97 | 21.43 | 637 | 0.19 |
| 80 | 23.42 | 34.35 | 23.34 | 455 | 50 | 28.42 | 34.00 | 21.53 | 628 | 0.32 |
| 119 | 13.96 | 34.82 | 26.07 | 194 | 75 | 25.15 | 34.32 | 22.80 | 506 | 0.46 |
| 158 | 12.70 | 34.88 | 26.38 | 166 | 100 | 16.00 | 34.61 | 25.47 | 252 | 0.56 |
| 194 | 11.94 | 34.82 | 26.48 | 156 | 150 | 12.87 | 34.88 | 26.34 | 169 | 0.67 |
| 280 | 10.88 | 34.76 | 26.63 | 142 | 200 | 11.86 | 34.81 | 26.49 | 155 | 0.75 |
| 374 | 9.97 | 34.70 | 26.74 | 131 | 250 | 11.26 | 34.77 | 26.57 | 148 | 0.83 |
| 469 | 8.77 | 34.65 | 26.90 | 116 | 300 | 10.69 | 34.75 | 26.66 | 139 | 0.90 |
| 568 | 7.61 | 34.60 | 27.04 | 103 | 400 | 9.66 | 34.69 | 26.79 | 127 | 1.04 |
| | | | | | 500 | 8.38 | 34.64 | 26.95 | 111 | 1.17 |
| 601 | 7.16 | 34.62 | 27.12 | 95 | 600 | 7.21 | 34.60 | 27.10 | 98 | 1.28 |
| 704 | 6.17 | 34.55 | 27.20 | 88 | 700 | 6.19 | 34.56 | 27.20 | 88 | 1.39 |
| 755 | 5.82 | 34.60 | 27.28 | 80 | 800 | 5.61 | 34.57 | 27.28 | 80 | 1.48 |
| 807 | 5.58 | 34.56 | 27.28 | 80 | 1000 | 4.58 | 34.58 | 27.41 | 68 | 1.65 |
| 859 | 5.22 | 34.58 | 27.34 | 75 | 1200 | 3.98 | 34.60 | 27.49 | 60 | 1.80 |
| 911 | 4.93 | 34.59 | 27.38 | 71 | 1500 | 3.06 | 34.66 | 27.63 | 47 | 1.99 |
| 962 | 4.73 | 34.58 | 27.39 | 69 | | | | | | |
| 1014 | 4.53 | 34.58 | 27.42 | 67 | | | | | | |
| 1536 | 2.96 | 34.66 | 27.64 | 46 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 28 | USS MARYSVILLE; May 13, 1952; 1625 GCT; 10°19'N, 109°18'W; sounding, 400 fm; wind, calm; weather, partly cloudy; sea, smooth; wire angle, 00°. | | | | | | | | | |
| 0 | 29.30 | 33.61 | 20.94 | 684 | 0 | 29.30 | 33.61 | 20.94 | 684 | 0.00 |
| 10 | 29.30 | 33.68 | 20.99 | 679 | 10 | 29.30 | 33.68 | 20.99 | 679 | 0.07 |
| 25 | 29.28 | 33.66 | 20.99 | 680 | 20 | 29.29 | 33.66 | 20.98 | 680 | 0.14 |
| 50 | 29.28 | 33.71 | 21.02 | 677 | 30 | 29.28 | 33.66 | 20.99 | 680 | 0.20 |
| 80 | 19.05 | 34.58 | 24.71 | 325 | 50 | 29.28 | 33.71 | 21.02 | 677 | 0.34 |
| 120 | 13.14 | 34.85 | 26.27 | 176 | 75 | 23.30 | 34.35 | 23.38 | 452 | 0.48 |
| 159 | 12.45 | 34.84 | 26.40 | 164 | 100 | 14.05 | 34.83 | 26.06 | 196 | 0.56 |
| 197 | 11.87 | 34.80 | 26.48 | 156 | 150 | 12.59 | 34.85 | 26.38 | 166 | 0.66 |
| 293 | 10.79 | 34.75 | 26.64 | 141 | 200 | 11.83 | 34.80 | 26.49 | 156 | 0.74 |
| 391 | 10.05 | 34.70 | 26.73 | 132 | 250 | 11.26 | 34.77 | 26.57 | 148 | 0.82 |
| 488 | 8.92 | 34.65 | 26.88 | 118 | 300 | 10.76 | 34.75 | 26.64 | 141 | 0.89 |
| 586 | 7.33 | 34.57 | 27.05 | 101 | 400 | 9.97 | 34.70 | 26.74 | 131 | 1.04 |
| | | | | | 500 | 8.72 | 34.64 | 26.90 | 116 | 1.17 |
| | | | | | 600 | (7.10) | (34.56) | (27.08) | (99) | (1.29) |
| 29 | USS MARYSVILLE; May 13, 1952; 2034, 1840 GCT; 10°22'N, 109°24'W; sounding, 1460 fm; wind, calm; weather, missing; sea, missing; wire angle, 05°, 07°. | | | | | | | | | |
| 0 | 30.91 | 33.74 | 20.49 | 728 | 0 | 30.91 | 33.74 | 20.49 | 728 | 0.00 |
| 10 | 29.44 | 33.75 | 21.00 | 679 | 10 | 29.44 | 33.75 | 21.00 | 679 | 0.07 |
| 25 | 29.35 | 33.74 | 21.02 | 677 | 20 | 29.40 | 33.74 | 21.01 | 678 | 0.14 |
| 50 | 27.64 | 34.02 | 21.80 | 602 | 30 | 29.28 | 33.74 | 21.05 | 674 | 0.21 |
| 79 | 19.76 | 34.58 | 24.52 | 342 | 50 | 27.64 | 34.02 | 21.80 | 602 | 0.33 |
| 119 | 13.39 | 34.83 | 26.20 | 183 | 75 | 21.00 | 34.50 | 24.13 | 379 | 0.46 |
| 158 | 12.46 | 34.85 | 26.40 | 163 | 100 | 15.30 | 34.77 | 25.75 | 226 | 0.53 |
| 196 | 11.93 | 34.79 | 26.46 | 158 | 150 | 12.62 | 34.85 | 26.37 | 166 | 0.63 |
| 287 | 10.95 | 34.58 | 26.48 | 156 | 200 | 11.87 | 34.77 | 26.45 | 158 | 0.72 |
| 384 | 10.00 | 34.60 | 26.66 | 139 | 250 | 11.31 | 34.64 | 26.46 | 158 | 0.80 |
| 482 | 8.35 | 34.77u | | | 300 | 10.81 | 34.58 | 26.50 | 154 | 0.88 |
| 581 | 6.90 | 34.74u | | | 400 | 9.77 | 34.60 | 26.70 | 135 | 1.03 |
| | | | | | 500 | 8.09 | 34.64 | 27.00 | 107 | 1.16 |
| 480a) | 8.35 | 34.64 | 26.96 | 111 | 600 | 7.09 | 34.61 | 27.12 | 95 | 1.27 |
| 576 | 7.29 | 34.61 | 27.09 | 98 | 700 | 6.32 | 34.57 | 27.19 | 88 | 1.37 |
| 672 | 6.54 | 34.60 | 27.19 | 89 | 800 | 5.58 | 34.55 | 27.27 | 81 | 1.47 |
| 720 | 6.12b) | 34.54 | 27.20 | 88 | 1000 | 4.74 | 34.54 | 27.36 | 72 | 1.64 |
| 768 | 5.71 | 34.54 | 27.25 | 83 | 1200 | 3.80 | 34.61 | 27.52 | 58 | 1.79 |
| 817 | 5.51 | 34.56 | 27.29 | 79 | 1500 | 3.07 | 34.60 | 27.58 | 52 | 1.99 |
| 865 | 5.20 | 34.56 | 27.32 | 76 | 2000 | (2.01) | (34.69) | (27.74) | (36) | (2.26) |
| 913 | 5.04 | 34.56 | 27.34 | 74 | | | | | | |
| 961 | 4.93 | 34.54 | 27.34 | 74 | | | | | | |
| 1155 | 3.90 | 34.61 | 27.51 | 59 | | | | | | |
| 1448 | 3.13 | 34.60 | 27.58 | 52 | | | | | | |
| 1940 | 2.10 | 34.68 | 27.73 | 38 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 5.87°C, not used in interpolation.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| USS MARYSVILLE; May 14, 1952; 0025, 0043 GCT; 10°15'N, 109°14'W; sounding, 510 fm; wind, calm; weather, partly cloudy; sea, smooth; wire angle, 00°, 00°. | | | | | | | | | | 30 |
| 0 | 29.93 | 33.50 | 20.65 | 713 | 0 | 29.93 | 33.50 | 20.65 | 713 | 0.00 |
| 10 | 29.38 | 33.50 | 20.83 | 695 | 10 | 29.38 | 33.50 | 20.83 | 695 | 0.07 |
| 25 | 29.31 | 33.50 | 20.86 | 693 | 20 | 29.35 | 33.50 | 20.84 | 694 | 0.14 |
| 50 | 29.30 | 33.84 | 21.11 | 668 | 30 | 29.30 | 33.50 | 20.86 | 692 | 0.21 |
| 80 | 17.46 | 34.67 | 25.17 | 280 | 50 | 29.30 | 33.84 | 21.11 | 668 | 0.35 |
| 120 | 13.29 | 34.87 | 26.25 | 178 | 75 | 20.50 | 34.54 | 24.30 | 363 | 0.48 |
| 159 | 12.41 | 34.85 | 26.41 | 162 | 100 | 14.53 | 34.82 | 25.95 | 206 | 0.55 |
| | | | | | 150 | 12.58 | 34.86 | 26.39 | 165 | 0.64 |
| 197 | 11.81 | 34.79 | 26.48 | 156 | 200 | 11.77 | 34.79 | 26.49 | 155 | 0.72 |
| 291 | 10.70 | 34.72 | 26.63 | 142 | 250 | 11.20 | 34.74 | 26.56 | 149 | 0.80 |
| 387 | 9.72 | 34.71 | 26.79 | 126 | 300 | 10.63 | 34.72 | 26.64 | 141 | 0.88 |
| 483 | 8.42 | 34.61 | 26.92 | 114 | 400 | 9.56 | 34.70 | 26.81 | 125 | 1.02 |
| 581 | 7.53 | 34.55 | 27.01 | 106 | 500 | 8.26 | 34.59 | 26.93 | 113 | 1.15 |
| 679 | 6.95 | 34.55 | 27.09 | 98 | 600 | 7.43 | 34.55 | 27.02 | 104 | 1.26 |
| USS MARYSVILLE; May 14, 1952; 0957, 0842 GCT; 10°11'N, 109°17'W; sounding, 1470 fm; wind, calm; weather, missing; sea, smooth; wire angle, 00°, 00°. | | | | | | | | | | 31 |
| 0 | 29.31 | 33.34 | 20.74 | 704 | 0 | 29.31 | 33.34 | 20.74 | 704 | 0.00 |
| 10 | 29.32 | 33.37 | 20.76 | 702 | 10 | 29.32 | 33.37 | 20.76 | 702 | 0.07 |
| 25 | 29.42 | 33.72 | 20.98 | 680 | 20 | 29.39 | 33.80 | 21.05 | 674 | 0.14 |
| 50 | 26.62 | 34.13 | 22.21 | 563 | 30 | 29.45 | 33.80 | 21.03 | 676 | 0.21 |
| 80 | 16.83 | 34.69 | 25.34 | 265 | 50 | 26.62 | 34.13 | 22.21 | 563 | 0.33 |
| 120 | 13.57 | 34.83 | 26.16 | 186 | 75 | 18.35 | 34.61 | 24.91 | 306 | 0.44 |
| 159 | 12.47 | 34.81 | 26.37 | 166 | 100 | 15.05 | 34.80 | 25.83 | 218 | 0.51 |
| 198 | 11.74 | 34.74 | 26.46 | 158 | 150 | 12.68 | 34.82 | 26.34 | 170 | 0.60 |
| 294 | 10.62 | 34.72 | 26.64 | 140 | 200 | 11.72 | 34.74 | 26.46 | 158 | 0.69 |
| 392 | 9.73 | 34.67 | 26.76 | 129 | 250 | 11.10 | 34.73 | 26.57 | 148 | 0.77 |
| 490 | 8.39 | 34.60 | 26.92 | 114 | 300 | 10.57 | 34.72 | 26.65 | 140 | 0.84 |
| 588 | 7.02 | 34.55 | 27.08 | 99 | 400 | 9.62 | 34.66 | 26.77 | 128 | 0.98 |
| | | | | | 500 | 8.21 | 34.59 | 26.94 | 112 | 1.11 |
| 487a) | 8.34 | 34.60 | 26.93 | 113 | 600 | 6.89 | 34.56 | 27.11 | 96 | 1.23 |
| 584 | 7.02 | 34.57 | 27.10 | 97 | 700 | 6.11 | 34.54 | 27.20 | 88 | 1.33 |
| 680 | 6.28 | 34.55 | 27.18 | 89 | 800 | 5.65 | 34.53 | 27.25 | 83 | 1.42 |
| 729 | 5.88 | 34.53 | 27.22 | 86 | 1000 | 4.59 | 34.54 | 27.38 | 71 | 1.60 |
| 778 | 5.75 | 34.52 | 27.23 | 85 | 1200 | 3.73 | 34.57 | 27.49 | 60 | 1.75 |
| 826 | 5.58 | 34.54 | 27.26 | 82 | 1500 | 2.99 | 34.59 | 27.58 | 52 | 1.95 |
| 875 | 5.50 | 34.52 | 27.26 | 82 | 2000 | (2.04) | (34.63) | (27.69) | (41) | (2.23) |
| 923 | 5.14 | 34.52 | 27.30 | 78 | | | | | | |
| 972 | 4.72 | 34.54 | 27.36 | 72 | | | | | | |
| 1166 | 3.84 | 34.58 | 27.49 | 60 | | | | | | |
| 1458 | 3.09 | 34.58 | 27.56 | 53 | | | | | | |
| 1945 | 2.12 | 34.63 | 27.69 | 42 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| **32** | USS MARYSVILLE; May 14, 1952; 1408, 1240 GCT; 10°03'N, 109°22'W; sounding, 1950 fm; wind, direction missing, force 1; weather, missing; sea, smooth; wire angle, missing, 06°. | | | | | | | | | |
| 0 | 29.47 | 33.35 | 20.69 | 709 | 0 | 29.47 | 33.35 | 20.69 | 709 | 0.00 |
| 10 | 29.46 | 33.31 | 20.66 | 711 | 10 | 29.46 | 33.31 | 20.66 | 711 | 0.07 |
| 25 | 29.42 | 33.42 | 20.76 | 702 | 20 | 29.44 | 33.37 | 20.72 | 706 | 0.14 |
| 50 | 26.11 | 34.07 | 22.32 | 552 | 30 | 29.42 | 33.47 | 20.80 | 698 | 0.21 |
| 80 | 16.69 | 34.73 | 25.40 | 259 | 50 | 26.11 | 34.07 | 22.32 | 552 | 0.34 |
| 120 | 13.53 | 34.85 | 26.19 | 184 | 75 | 18.10 | 34.68 | 25.02 | 295 | 0.44 |
| 159 | 12.42 | 34.79 | 26.36 | 167 | 100 | 14.85 | 34.82 | 25.88 | 213 | 0.51 |
| 197 | 11.80 | 34.78 | 26.48 | 156 | 150 | 12.57 | 34.80 | 26.34 | 169 | 0.61 |
| 292 | 10.72 | 34.72 | 26.63 | 142 | 200 | 11.78 | 34.78 | 26.48 | 156 | 0.69 |
| 391 | 9.47 | 34.64 | 26.78 | 128 | 250 | 11.22 | 34.74 | 26.55 | 149 | 0.77 |
| 489 | 8.29 | 34.60 | 26.94 | 113 | 300 | 10.66 | 34.72 | 26.64 | 141 | 0.84 |
| 588 | 7.03 | - | | | 400 | 9.36 | 34.64 | 26.80 | 126 | 0.98 |
| | | | | | 500 | 8.12 | 34.59 | 26.95 | 111 | 1.11 |
| 583a) | 7.08 | 34.56 | 27.08 | 99 | 600 | 6.96 | 34.56 | 27.10 | 97 | 1.22 |
| 679 | 6.36 | 34.55 | 27.17 | 90 | 700 | 6.27 | 34.54 | 27.18 | 90 | 1.33 |
| 727 | 6.14 | 34.54 | 27.19 | 88 | 800 | 5.72 | 34.53 | 27.24 | 84 | 1.42 |
| 775 | 5.88 | 34.53 | 27.22 | 86 | 1000 | 4.49 | 34.54 | 27.39 | 70 | 1.60 |
| 823 | 5.54 | 34.53 | 27.26 | 82 | 1200 | 3.81 | 34.55 | 27.47 | 62 | 1.75 |
| 871 | 5.25 | 34.53 | 27.30 | 79 | | | | | | |
| 919 | 4.91 | 34.54 | 27.34 | 74 | | | | | | |
| 967 | 4.62 | - | | | | | | | | |
| 1160 | 3.92 | 34.55 | 27.46 | 63 | | | | | | |
| 1449 | 3.11 | 34.63 | 27.60 | 50 | | | | | | |
| **33** | USS MARYSVILLE; May 15, 1952; 0255 GCT; 10°18'N, 109°10.5'W; sounding, 420 fm; wind, calm; weather, overcast; sea, smooth; wire angle, 10°. | | | | | | | | | |
| 0 | 29.58 | 33.35 | 20.65 | 712 | 0 | 29.58 | 33.35 | 20.65 | 712 | 0.00 |
| 10 | 29.49 | 33.38 | 20.71 | 707 | 10 | 29.49 | 33.38 | 20.71 | 707 | 0.07 |
| 20 | 29.50 | 33.48 | 20.78 | 700 | 20 | 29.50 | 33.48 | 20.78 | 700 | 0.14 |
| 48 | 28.43 | 33.78 | 21.36 | 644 | 30 | 27.49 | 33.58 | 21.51 | 630 | 0.21 |
| 77 | 18.61 | 34.57 | 24.81 | 315 | 50 | 27.40 | 33.80 | 21.71 | 611 | 0.33 |
| 116 | 13.41 | 34.81 | 26.18 | 184 | 75 | 19.00 | 34.55 | 24.70 | 326 | 0.45 |
| 155 | 12.56 | 34.79 | 26.34 | 170 | 100 | 14.96 | 34.79 | 25.84 | 217 | 0.52 |
| 193 | 11.65 | 34.77 | 26.50 | 155 | 150 | 12.70 | 34.79 | 26.31 | 172 | 0.62 |
| 288 | 10.91 | 34.72 | 26.59 | 145 | 200 | 11.61 | 34.77 | 26.50 | 154 | 0.70 |
| 385 | 9.94 | 34.70 | 26.75 | 131 | 250 | 11.21 | 34.74 | 26.55 | 149 | 0.78 |
| 482 | 8.56 | 34.61 | 26.90 | 116 | 300 | 10.81 | 34.72 | 26.61 | 144 | 0.86 |
| 579 | 7.27 | 34.51 | 27.02 | 105 | 400 | 9.77 | 34.69 | 26.77 | 129 | 1.00 |
| 676 | 6.62 | 34.55 | 27.14 | 94 | 500 | 8.29 | 34.59 | 26.93 | 113 | 1.13 |
| | | | | | 600 | 7.12 | 34.52 | 27.05 | 102 | 1.25 |

a) Overlapping casts.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

USS MARYSVILLE; May 15, 1952; 0625, 0509 GCT; 10°18'N, 109°06'W; sounding, 1500 fm; wind, 200°, force 1; weather, overcast; sea, smooth; wire angle, 06°, 12°. 34

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.49 | 33.37 | 20.70 | 708 | 0 | 29.49 | 33.37 | 20.70 | 708 | 0.00 |
| 10 | 29.48 | 33.39 | 20.72 | 706 | 10 | 29.48 | 33.39 | 20.72 | 706 | 0.07 |
| 25 | 29.46 | 33.53 | 20.83 | 695 | 20 | 29.47 | 33.56 | 20.85 | 693 | 0.14 |
| 50 | 28.59 | 33.83 | 21.34 | 646 | 30 | 29.46 | 33.67 | 20.93 | 685 | 0.21 |
| 79 | 20.32 | 34.48 | 24.30 | 363 | 50 | 28.59 | 33.83 | 21.34 | 646 | 0.34 |
| 118 | 13.71 | 34.84 | 26.14 | 188 | 75 | 20.75 | 34.34 | 24.08 | 384 | 0.47 |
| 157 | 12.64 | 34.80 | 26.33 | 170 | 100 | 14.70 | 34.78 | 25.89 | 212 | 0.55 |
| 196 | 11.99 | 34.74 | 26.41 | 163 | 150 | 12.84 | 34.81 | 26.30 | 173 | 0.65 |
| 292 | 10.75 | 34.74 | 26.64 | 141 | 200 | 11.92 | 34.74 | 26.42 | 162 | 0.73 |
| 390 | 9.99 | 34.69 | 26.73 | 132 | 250 | 11.24 | 34.73 | 26.54 | 150 | 0.81 |
| 489 | 8.82 | 34.61 | 26.86 | 120 | 300 | 10.68 | 34.74 | 26.65 | 140 | 0.89 |
| 588 | 7.23 | 34.52 | 27.03 | 104 | 400 | 9.89 | 34.68 | 26.74 | 131 | 1.03 |
| | | | | | 500 | 8.68 | 34.61 | 26.88 | 118 | 1.17 |
| 524a) | 8.31 | 34.60 | 26.93 | 113 | 600 | 7.13 | 34.52 | 27.04 | 103 | 1.28 |
| 618 | 7.01 | 34.52 | 27.06 | 101 | 700 | 6.53 | 34.52 | 27.13 | 95 | 1.39 |
| 712 | 6.46 | 34.52 | 27.14 | 94 | 800 | 5.70 | 34.52 | 27.23 | 85 | 1.49 |
| 759 | 6.06 | 34.52 | 27.19 | 89 | 1000 | 4.71 | 34.53 | 27.36 | 73 | 1.67 |
| 806 | 5.66 | 34.53 | 27.25 | 83 | 1200 | 4.10 | 34.54 | 27.43 | 66 | 1.83 |
| 854 | 5.30 | 34.52 | 27.28 | 80 | 1500 | 3.07 | 34.57 | 27.56 | 54 | 2.04 |
| 901 | 5.01 | 34.54 | 27.33 | 75 | 2000 | (2.15) | (34.60) | (27.66) | (44) | (2.34) |
| 949 | 4.82 | 34.51 | 27.33 | 75 | | | | | | |
| 997 | 4.72 | 34.53 | 27.36 | 73 | | | | | | |
| 1188 | 4.16 | 34.54 | 27.43 | 66 | | | | | | |
| 1476 | 3.14 | 34.57 | 27.55 | 54 | | | | | | |
| 1958 | 2.20 | 34.60 | 27.66 | 44 | | | | | | |

USS MARYSVILLE; May 15, 1952; 1011, 0853 GCT; 10°14'N, 108°57'W; sounding, 1820 fm; wind, 190°, force 2; weather, cloudy; sea, smooth; wire angle, 13°, 08°. 35

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.60 | 33.56 | 20.80 | 698 | 0 | 29.60 | 33.56 | 20.80 | 698 | 0.00 |
| 10 | 29.62 | 33.54 | 20.78 | 700 | 10 | 29.62 | 33.54 | 20.78 | 700 | 0.07 |
| 24 | 29.50 | 33.58 | 20.85 | 693 | 20 | 29.55 | 33.56 | 20.82 | 696 | 0.14 |
| 48 | 28.16 | 33.94 | 21.57 | 624 | 30 | 29.45 | 33.64 | 20.91 | 687 | 0.21 |
| 77 | 19.86 | 34.52 | 24.45 | 349 | 50 | 28.05 | 33.95 | 21.61 | 620 | 0.34 |
| 115 | 14.40 | 34.82 | 25.98 | 203 | 75 | 20.45 | 34.49 | 24.27 | 366 | 0.46 |
| 153 | 12.71 | 34.81 | 26.32 | 171 | 100 | 15.80 | 34.80 | 25.66 | 234 | 0.54 |
| 190 | 11.83 | 34.78 | 26.47 | 157 | 150 | 12.86 | 34.81 | 26.29 | 174 | 0.64 |
| 281 | 10.63 | 34.72 | 26.64 | 141 | 200 | 11.70 | 34.77 | 26.49 | 155 | 0.73 |
| 375 | 9.92 | 34.67 | 26.73 | 133 | 250 | 11.05 | 34.74 | 26.58 | 146 | 0.81 |
| 470 | 8.96 | 34.61 | 26.84 | 122 | 300 | 10.50 | 34.71 | 26.66 | 139 | 0.88 |
| 565 | 7.75 | 34.59 | 27.01 | 106 | 400 | 9.69 | 34.66 | 26.76 | 130 | 1.02 |
| | | | | | 500 | 8.66 | 34.59 | 26.87 | 119 | 1.16 |
| 509a) | 8.55 | 34.57 | 26.87 | 119 | 600 | 7.19 | 34.55 | 27.06 | 101 | 1.27 |
| 612 | 7.02 | 34.54 | 27.07 | 100 | 700 | 6.18 | 34.52 | 27.17 | 90 | 1.38 |
| 717 | 6.03 | 34.52 | 27.19 | 89 | 800 | 5.37 | 34.51 | 27.26 | 82 | 1.48 |
| 768 | 5.62 | 34.51 | 27.23 | 84 | 1000 | 4.66 | 34.52 | 27.36 | 73 | 1.65 |
| 819 | 5.28 | 34.52 | 27.28 | 80 | 1200 | 3.89 | 34.56 | 27.47 | 62 | 1.81 |
| 871 | 5.10 | 34.52 | 27.30 | 78 | 1500 | 2.98 | 34.59 | 27.58 | 52 | 2.01 |
| 923 | 4.89 | 34.51 | 27.32 | 76 | 2000 | 2.14 | 34.61 | 27.67 | 43 | 2.29 |
| 975 | 4.75 | 34.52 | 27.35 | 74 | | | | | | |
| 1027 | 4.58 | 34.53 | 27.37 | 71 | | | | | | |
| 1235 | 3.75 | 34.57 | 27.49 | 60 | | | | | | |
| 1546 | 2.86 | 34.59 | 27.59 | 51 | | | | | | |
| 2068 | 2.07 | 34.61 | 27.68 | 43 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 36 USS MARYSVILLE; May 15, 1952; 1425 GCT; 10°21'N, 109°13'W; sounding, 420 fm; wind, calm; weather, partly cloudy; sea, smooth; wire angle, 20°. | | | | | | | | | | |
| 0 | 29.33 | 33.30 | 20.70 | 708 | 0 | 29.33 | 33.30 | 20.70 | 708 | 0.00 |
| 10 | 29.41 | 33.35 | 20.71 | 707 | 10 | 29.41 | 33.35 | 20.71 | 707 | 0.07 |
| 24 | 29.52 | 33.48 | 20.77 | 701 | 20 | 29.45 | 33.42 | 20.75 | 703 | 0.14 |
| 47 | 28.39a) | 33.81 | 21.39 | 641 | 30 | 29.50 | 33.57 | 20.85 | 694 | 0.21 |
| 75 | 19.54 | 34.52 | 24.54 | 341 | 50 | 28.00 | 33.89 | 21.58 | 623 | 0.34 |
| 113 | 14.36 | 34.78 | 25.96 | 205 | 75 | 19.54 | 34.52 | 24.54 | 341 | 0.46 |
| 149 | 12.64 | 34.83 | 26.35 | 168 | 100 | 15.85 | 34.72 | 25.59 | 241 | 0.54 |
| 184 | 12.13 | 34.79 | 26.42 | 162 | 150 | 12.62 | 34.83 | 26.36 | 168 | 0.64 |
| 268 | 11.08 | 34.75 | 26.59 | 146 | 200 | 11.92 | 34.78 | 26.45 | 159 | 0.73 |
| 357 | 9.83 | 34.68 | 26.75 | 130 | 250 | 11.31 | 34.76 | 26.55 | 149 | 0.81 |
| 449 | 8.89 | 34.63 | 26.87 | 119 | 300 | 10.65 | 34.73 | 26.65 | 140 | 0.88 |
| 542 | 7.81 | 34.59 | 27.00 | 107 | 400 | 9.35 | 34.65 | 26.81 | 125 | 1.02 |
| 635 | 6.82 | 34.56 | 27.12 | 95 | 500 | 8.26 | 34.61 | 26.95 | 112 | 1.15 |
| 728 | 5.65 | 34.54 | 27.25 | 83 | 600 | 7.20 | 34.57 | 27.07 | 100 | 1.26 |
| | | | | | 700 | 5.99 | 34.55 | 27.22 | 86 | 1.36 |
| 37 USS MARYSVILLE; May 15, 1952; 1840, 1725 GCT; 10°26'N, 109°12'W; sounding, 1550 fm; wind, 230°, force 2; weather, cloudy; sea, smooth; wire angle, 05°, 07°. | | | | | | | | | | |
| 0 | 29.66 | 33.53 | 20.76 | 702 | 0 | 29.66 | 33.53 | 20.76 | 702 | 0.00 |
| 10 | 29.53 | 33.58 | 20.84 | 694 | 10 | 29.53 | 33.58 | 20.84 | 694 | 0.07 |
| 25 | 29.39 | 33.63 | 20.93 | 686 | 20 | 29.45 | 33.62 | 20.90 | 689 | 0.14 |
| 49 | 28.30 | 33.87 | 21.47 | 634 | 30 | 29.38 | 33.65 | 20.95 | 684 | 0.21 |
| 79 | 20.54 | 34.47 | 24.23 | 370 | 50 | 28.25 | 33.88 | 21.49 | 632 | 0.34 |
| 118 | 13.73 | 34.81 | 26.12 | 191 | 75 | 21.45 | 34.41 | 23.94 | 397 | 0.47 |
| 157 | 12.67 | 34.83 | 26.35 | 169 | 100 | 15.15 | 34.72 | 25.74 | 226 | 0.55 |
| 195 | 12.04 | 34.78 | 26.43 | 161 | 150 | 12.69 | 34.83 | 26.34 | 169 | 0.65 |
| 291 | 10.85 | 34.73 | 26.61 | 144 | 200 | 11.97 | 34.78 | 26.44 | 160 | 0.73 |
| 387 | 10.06 | 34.70 | 26.73 | 133 | 250 | 11.32 | 34.75 | 26.54 | 150 | 0.81 |
| 484 | 8.86 | 34.58 | 26.83 | 123 | 300 | 10.77 | 34.73 | 26.63 | 142 | 0.89 |
| 582 | 7.33 | 34.54 | 27.03 | 104 | 400 | 9.84 | 34.68 | 26.75 | 130 | 1.03 |
| | | | | | 500 | 8.40 | 34.57 | 26.90 | 117 | 1.17 |
| 488b) | 8.53 | 34.56 | 26.87 | 119 | 600 | 7.16 | 34.53 | 27.05 | 102 | 1.28 |
| 585 | 7.20 | 34.54 | 27.05 | 102 | 700 | 6.35 | 34.52 | 27.15 | 92 | 1.39 |
| 680 | 6.54 | 34.52 | 27.12 | 95 | 800 | 5.66 | 34.51 | 27.23 | 85 | 1.49 |
| 729 | 6.04 | 34.52 | 27.19 | 89 | 1000 | 4.62 | 34.55 | 27.38 | 70 | 1.67 |
| 777 | 5.77 | 34.51 | 27.22 | 86 | 1200 | 3.81 | 34.55 | 27.47 | 62 | 1.82 |
| 825 | 5.54 | 34.52 | 27.25 | 83 | 1500 | 3.02 | 34.56 | 27.55 | 54 | 2.02 |
| 873 | 5.22 | 34.53 | 27.30 | 78 | 2000 | (2.04) | (34.60) | (27.67) | (43) | (2.31) |
| 921 | 4.99 | 34.54 | 27.33 | 75 | | | | | | |
| 969 | 4.75 | 34.55 | 27.37 | 72 | | | | | | |
| 1162 | 3.94 | 34.55 | 27.46 | 63 | | | | | | |
| 1455 | 3.12 | 34.56 | 27.54 | 55 | | | | | | |
| 1941 | 2.16 | 34.60 | 27.66 | 44 | | | | | | |

a) Alternate value, 28.11°C, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| USS MARYSVILLE; May 15, 1952; 2300, 2113 GCT; 10°36'N, 109°09'W; sounding, 1540 fm; wind, 340°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°, 00°. | | | | | | | | | | 38 |
| 0 | 29.70 | - | | | 0 | 29.70 | (33.70) | (20.87) | (691) | (0.00) |
| 20 | 29.58 | 33.70 | 20.92 | 687 | 10 | 29.64 | (33.70) | (20.90) | (689) | (0.07) |
| 50 | 29.18 | 33.71 | 21.06 | 673 | 20 | 29.58 | 33.70 | 20.92 | 687 | 0.14 |
| 80 | 19.63 | 34.52 | 24.51 | 343 | 30 | 29.53 | 33.70 | 20.93 | 685 | 0.21 |
| 119 | 13.80 | 34.80 | 26.09 | 193 | 50 | 29.18 | 33.71 | 21.06 | 673 | 0.34 |
| 158 | 12.73 | 34.81 | 26.32 | 171 | 75 | 21.40 | 34.42 | 23.96 | 395 | 0.48 |
| 197 | 12.15 | 34.78 | 26.41 | 163 | 100 | 16.10 | 34.74 | 25.54 | 245 | 0.56 |
| 292 | 10.89 | 34.72 | 26.60 | 145 | 150 | 12.89 | 34.81 | 26.29 | 174 | 0.66 |
| 389 | 10.07 | 34.72 | 26.74 | 131 | 200 | 12.11 | 34.78 | 26.42 | 162 | 0.75 |
| 486 | 8.59 | 34.63 | 26.91 | 115 | 250 | 11.43 | 34.74 | 26.51 | 153 | 0.83 |
| 583 | 7.48 | 34.55 | 27.02 | 105 | 300 | 10.81 | 34.72 | 26.61 | 144 | 0.91 |
| 682 | 6.50 | 34.53 | 27.14 | 94 | 400 | 9.95 | 34.72 | 26.76 | 129 | 1.05 |
| | | | | | 500 | 8.41 | 34.63 | 26.94 | 112 | 1.18 |
| 528a) | 8.11 | 34.61 | 26.97 | 109 | 600 | 7.36 | 34.57 | 27.05 | 102 | 1.30 |
| 561 | 7.66 | 34.58 | 27.01 | 105 | 700 | 6.47 | 34.53 | 27.14 | 93 | 1.41 |
| 595 | 7.40 | 34.57 | 27.04 | 102 | 800 | 5.89 | 34.53 | 27.22 | 86 | 1.51 |
| 629 | 7.12 | 34.57 | 27.08 | 99 | 1000 | 4.58 | 34.55 | 27.39 | 70 | 1.68 |
| 663 | 6.83 | 34.55 | 27.11 | 96 | 1200 | 3.79 | 34.57 | 27.49 | 60 | 1.84 |
| 695 | 6.50 | 34.56 | 27.16 | 91 | 1500 | 3.04 | 34.59 | 27.58 | 52 | 2.03 |
| 761 | 6.33 | 34.53 | 27.16 | 91 | 2000 | 2.07 | 34.63 | 27.69 | 41 | 2.32 |
| 867 | 5.38 | 34.53 | 27.28 | 80 | | | | | | |
| 1072 | 4.23 | 34.56 | 27.43 | 66 | | | | | | |
| 1423 | 3.20 | 34.59 | 27.56 | 53 | | | | | | |
| 1794 | 2.46 | 34.61 | 27.64 | 46 | | | | | | |
| 2205 | 1.68 | 34.65 | 27.74 | 37 | | | | | | |
| USS MARYSVILLE; May 16, 1952; 1652, 1458 GCT; 11°28'N, 107°49'W; sounding, 1820 fm; wind, 060°, force 5; weather, partly cloudy; sea, rough; wire angle, 47°, 45°. | | | | | | | | | | 39 |
| 0 | 29.26 | 33.22 | 20.66 | 711 | 0 | 29.26 | 33.22 | 20.66 | 711 | 0.00 |
| 10 | 29.31 | 33.23 | 20.65 | 712 | 10 | 29.31 | 33.23 | 20.65 | 712 | 0.07 |
| 25 | 29.29 | 33.26 | 20.68 | 709 | 20 | 29.30 | 33.25 | 20.67 | 710 | 0.14 |
| 48 | 27.95 | 33.91 | 21.61 | 620 | 30 | 29.29 | 33.40 | 20.79 | 699 | 0.21 |
| 74 | 27.13 | 34.04 | 21.98 | 585 | 50 | 27.90 | 33.92 | 21.64 | 618 | 0.34 |
| 111 | 17.05 | 34.63 | 25.24 | 274 | 75 | 27.07 | 34.05 | 22.00 | 583 | 0.50 |
| 145 | 13.27 | 34.82 | 26.22 | 181 | 100 | 20.65 | 34.43 | 24.17 | 375 | 0.62 |
| 179 | 12.16 | 34.78 | 26.41 | 163 | 150 | 13.05 | 34.82 | 26.26 | 177 | 0.76 |
| 263 | 11.04 | 34.74 | 26.59 | 146 | 200 | 11.87 | 34.77 | 26.45 | 158 | 0.84 |
| 361 | 9.95 | 34.67 | 26.72 | 133 | 250 | 11.21 | 34.75 | 26.56 | 148 | 0.92 |
| 476 | 8.49 | 34.60 | 26.91 | 116 | 300 | 10.64 | 34.71 | 26.63 | 141 | 1.00 |
| 597 | 7.10 | 34.54 | 27.06 | 101 | 400 | 9.47 | 34.65 | 26.79 | 127 | 1.14 |
| | | | | | 500 | 8.16 | 34.58 | 26.94 | 112 | 1.27 |
| 532a) | 7.72 | 34.54 | 26.97 | 109 | 600 | 7.05 | 34.54 | 27.07 | 100 | 1.38 |
| 649 | 6.60 | 34.56 | 27.15 | 93 | 700 | 6.27 | 34.56 | 27.19 | 89 | 1.49 |
| 768 | 5.82 | 34.54 | 27.23 | 85 | 800 | 5.62 | 34.54 | 27.26 | 82 | 1.58 |
| 827 | 5.47 | 34.55 | 27.28 | 80 | 1000 | 4.48 | 34.54 | 27.39 | 70 | 1.75 |
| 885 | 5.08 | 34.54 | 27.32 | 76 | 1200 | 3.75 | 34.57 | 27.49 | 60 | 1.90 |
| 947 | 4.77 | 34.54 | 27.36 | 73 | 1500 | 2.99 | 34.59 | 27.58 | 52 | 2.10 |
| 1006 | 4.45 | 34.53 | 27.39 | 70 | 2000 | 2.21 | 34.61 | 27.66 | 44 | 2.39 |
| 1067 | 4.23 | 34.55 | 27.43 | 66 | | | | | | |
| 1127 | 3.98 | 34.57 | 27.47 | 62 | | | | | | |
| 1372 | 3.29 | 34.57 | 27.54 | 56 | | | | | | |
| 1749 | 2.49 | 34.60 | 27.63 | 47 | | | | | | |
| 2391 | 1.86b) | 34.63 | 27.71 | 40 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 2.09°C, not used in interpolation.

USNEL SHUTTLE

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 40 | USS MARYSVILLE; May 17, 1952; 0910 GCT; 12°37'N, 106°15'W; sounding, 1790 fm; wind, 040°, force 2; weather, missing; sea, moderate; wire angle, 30°. | | | | | | | | | |
| 0 | 28.3 | 33.95 | 21.53 | 628 | 0 | 28.3 | 33.95 | 21.53 | 628 | 0.00 |
| 10 | 28.30 | 33.95 | 21.53 | 628 | 10 | 28.30 | 33.95 | 21.53 | 628 | 0.06 |
| 39 | 27.93 | 34.04 | 21.72 | 610 | 20 | 28.30 | 33.95 | 21.53 | 628 | 0.13 |
| 79 | 23.51 | 34.29 | 23.27 | 462 | 30 | 28.16 | 34.00 | 21.61 | 620 | 0.19 |
| 120 | 14.62 | 34.77 | 25.90 | 211 | 50 | 27.33 | 34.11 | 21.96 | 586 | 0.31 |
| 161 | 12.56 | 34.81 | 26.35 | 168 | 75 | 24.80 | 34.27 | 22.87 | 500 | 0.45 |
| 201 | 12.03 | 34.79 | 26.44 | 160 | 100 | 17.10 | 34.63 | 25.23 | 275 | 0.54 |
| 405 | 8.95 | 34.64 | 26.86 | 120 | 150 | 12.83 | 34.80 | 26.29 | 174 | 0.66 |
| 611 | 6.66 | 34.57 | 27.15 | 93 | 200 | 12.04 | 34.79 | 26.44 | 160 | 0.74 |
| 715 | 6.03 | 34.52 | 27.19 | 89 | 250 | 11.30 | 34.75 | 26.55 | 150 | 0.82 |
| 821 | 5.39 | 34.54 | 27.29 | 80 | 300 | 10.54 | 34.71 | 26.65 | 140 | 0.90 |
| 874 | 5.10 | 34.54 | 27.32 | 76 | 400 | 9.04 | 34.64 | 26.85 | 121 | 1.04 |
| 926 | 4.84 | 34.54 | 27.35 | 73 | 500 | 7.79 | 34.61 | 27.02 | 105 | 1.16 |
| 1033 | 4.30 | 34.56 | 27.43 | 66 | 600 | 6.76 | 34.57 | 27.13 | 94 | 1.27 |
| 1248 | 3.57 | 34.58 | 27.52 | 58 | 700 | 6.11 | 34.53 | 27.19 | 89 | 1.37 |
| | | | | | 800 | 5.56 | 34.54 | 27.27 | 81 | 1.46 |
| | | | | | 1000 | 4.44 | 34.55 | 27.40 | 68 | 1.63 |
| | | | | | 1200 | 3.72 | 34.58 | 27.50 | 59 | 1.78 |
| 41 | USS MARYSVILLE; May 17, 1952; 2312, 2138 GCT; 13°39'N, 104°51'W; sounding, 1720 fm; wind, 080°, force 2; weather, overcast; sea, moderate; wire angle, 00°, 00°. | | | | | | | | | |
| 0 | 28.97 | 34.00 | 21.35 | 646 | 0 | 28.97 | 34.00 | 21.35 | 646 | 0.00 |
| 10 | 28.98 | 34.01 | 21.35 | 645 | 10 | 28.98 | 34.01 | 21.35 | 645 | 0.06 |
| 25 | 28.87 | 34.00 | 21.38 | 643 | 20 | 28.97 | 34.00 | 21.35 | 646 | 0.13 |
| 50 | 27.55 | 34.02 | 21.83 | 600 | 30 | 28.76 | 34.00 | 21.41 | 639 | 0.19 |
| 79 | 23.64 | 34.39 | 23.31 | 458 | 50 | 27.55 | 34.02 | 21.83 | 600 | 0.32 |
| 117 | 15.16 | 34.75 | 25.76 | 224 | 75 | 24.05 | 34.33 | 23.14 | 474 | 0.45 |
| 156 | 12.80 | 34.83 | 26.32 | 171 | 100 | 19.10 | 34.68 | 24.77 | 319 | 0.55 |
| 195 | 12.23 | 34.81 | 26.42 | 162 | 150 | 12.94 | 34.83 | 26.29 | 174 | 0.68 |
| 292 | 10.87 | 34.74 | 26.62 | 143 | 200 | 12.16 | 34.81 | 26.43 | 161 | 0.76 |
| 390 | 9.32 | 34.63 | 26.80 | 126 | 250 | 11.45 | 34.77 | 26.53 | 151 | 0.84 |
| 488 | 8.02 | 34.57 | 26.95 | 111 | 300 | 10.76 | 34.74 | 26.64 | 141 | 0.92 |
| 586 | 6.93 | 34.56 | 27.10 | 97 | 400 | 9.14 | 34.61 | 26.81 | 125 | 1.06 |
| | | | | | 500 | 7.88 | 34.57 | 26.97 | 109 | 1.19 |
| 562a) | 7.21 | 34.57 | 27.07 | 100 | 600 | 6.86 | 34.56 | 27.11 | 96 | 1.30 |
| 676 | 6.16 | 34.57 | 27.21 | 86 | 700 | 5.99 | 34.57 | 27.24 | 84 | 1.40 |
| 788 | 5.46 | 34.57 | 27.30 | 78 | 800 | 5.39 | 34.57 | 27.31 | 77 | 1.49 |
| 845 | 5.10 | 34.58 | 27.35 | 73 | 1000 | 4.47 | 34.57 | 27.42 | 67 | 1.65 |
| 900 | 4.83 | 34.55 | 27.36 | 73 | 1200 | 3.72 | 34.60 | 27.52 | 58 | 1.80 |
| 957 | 4.65 | 34.56 | 27.39 | 70 | 1500 | 2.96 | 34.62 | 27.61 | 49 | 1.99 |
| 1014 | 4.40 | 34.58 | 27.43 | 66 | 2000 | 2.21 | 34.64 | 27.69 | 41 | 2.26 |
| 1070 | 4.16 | 34.60 | 27.47 | 62 | | | | | | |
| 1120 | 3.97 | 34.60 | 27.49 | 60 | | | | | | |
| 1354 | 3.28 | 34.60 | 27.56 | 53 | | | | | | |
| 1697 | 2.62 | 34.63 | 27.65 | 45 | | | | | | |
| 2268 | 1.86b) | 34.65 | 27.72 | 38 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 1.95°C, not used in interpolation.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| USS MARYSVILLE; May 18, 1952; 1330, 1207 GCT; 14°33'N, 103°17'W; sounding, 1750 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 00°, 13°. | | | | | | | | | | 42 |
| 0 | 28.22 | 34.22 | 21.76 | 606 | 0 | 28.22 | 34.22 | 21.76 | 606 | 0.00 |
| 10 | 28.27 | 34.22 | 21.74 | 608 | 10 | 28.27 | 34.22 | 21.74 | 608 | 0.06 |
| 26 | 26.74 | 34.44 | 22.40 | 545 | 20 | 26.92 | 34.37 | 22.29 | 555 | 0.12 |
| 52 | 23.14 | 34.54 | 23.57 | 433 | 30 | 25.95 | 34.47 | 22.67 | 519 | 0.17 |
| 81 | 16.50 | 34.58 | 25.33 | 265 | 50 | 23.50 | 34.53 | 23.45 | 444 | 0.27 |
| 122 | 13.00 | 34.78 | 26.24 | 179 | 75 | 17.90 | 34.57 | 24.99 | 298 | 0.36 |
| 162 | 11.94 | 34.77 | 26.44 | 160 | 100 | 14.55 | 34.71 | 25.86 | 214 | 0.43 |
| 202 | 11.44 | 34.76 | 26.53 | 152 | 150 | 12.23 | 34.77 | 26.39 | 165 | 0.52 |
| 302 | 10.28 | 34.71 | 26.70 | 135 | 200 | 11.50 | 34.76 | 26.52 | 153 | 0.61 |
| 404 | 8.79 | 34.60 | 26.86 | 120 | 250 | 10.90 | 34.74 | 26.61 | 144 | 0.68 |
| 505 | 7.43 | 34.58 | 27.05 | 102 | 300 | 10.32 | 34.71 | 26.69 | 136 | 0.76 |
| 607 | 6.47 | 34.56 | 27.17 | 91 | 400 | 8.87 | 34.60 | 26.85 | 121 | 0.89 |
| | | | | | 500 | 7.46 | 34.57 | 27.04 | 103 | 1.01 |
| 489a) | 7.56 | 34.57 | 27.02 | 105 | 600 | 6.52 | 34.55 | 27.15 | 92 | 1.12 |
| 589 | 6.65 | 34.55 | 27.13 | 94 | 700 | 5.76 | 34.54 | 27.24 | 84 | 1.21 |
| 687 | 5.85 | 34.53 | 27.22 | 86 | 800 | 5.13 | 34.54 | 27.32 | 77 | 1.30 |
| 737 | 5.51 | 34.54 | 27.27 | 81 | 1000 | 4.14 | 34.56 | 27.44 | 65 | 1.46 |
| 787 | 5.19 | 34.54 | 27.31 | 77 | 1200 | 3.55 | 34.56 | 27.50 | 59 | 1.61 |
| 836 | 4.87 | 34.54 | 27.35 | 74 | 1500 | 2.83 | 34.59 | 27.60 | 50 | 1.80 |
| 885 | 4.69 | 34.53 | 27.36 | 73 | 2000 | (2.02) | (34.63) | (27.70) | (41) | (2.07) |
| 935 | 4.45 | 34.54 | 27.39 | 69 | | | | | | |
| 985 | 4.19 | 34.56 | 27.44 | 65 | | | | | | |
| 1184 | 3.59 | 34.56 | 27.50 | 59 | | | | | | |
| 1484 | 2.87 | 34.59 | 27.59 | 51 | | | | | | |
| 1989 | 2.03 | 34.63 | 27.69 | 41 | | | | | | |
| USS MARYSVILLE; May 19, 1952; 0448, 0319 GCT; 15°24'N, 101°56'W; sounding, 1960 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 20°, 27°. | | | | | | | | | | 43 |
| 0 | 29.41 | 33.94 | 21.15 | 664 | 0 | 29.41 | 33.94 | 21.15 | 664 | 0.00 |
| 12 | 29.45 | 33.94 | 21.14 | 666 | 10 | 29.45 | 33.94 | 21.14 | 666 | 0.07 |
| 31 | 28.97 | 34.05 | 21.38 | 642 | 20 | 29.45 | 33.96 | 21.15 | 664 | 0.13 |
| 57 | 25.23b) | 34.12 | 22.63 | 523 | 30 | 29.00 | 34.02 | 21.35 | 645 | 0.20 |
| 88 | 18.20 | 34.61 | 24.94 | 302 | 50 | 26.80 | 34.10 | 22.13 | 571 | 0.32 |
| 131 | 13.11 | 34.82 | 26.25 | 178 | 75 | 20.55 | 34.38 | 24.16 | 376 | 0.44 |
| 173 | 12.08 | 34.82 | 26.45 | 159 | 100 | 15.80 | 34.73 | 25.60 | 239 | 0.52 |
| 216 | 11.52 | 34.76 | 26.51 | 153 | 150 | 12.58 | 34.83 | 26.36 | 167 | 0.62 |
| 322 | 10.19 | 34.70 | 26.70 | 135 | 200 | 11.75 | 34.78 | 26.48 | 156 | 0.70 |
| 428 | 8.44 | 34.62 | 26.93 | 113 | 250 | 11.14 | 34.74 | 26.57 | 148 | 0.78 |
| 537 | 7.17 | 34.55 | 27.06 | 101 | 300 | 10.51 | 34.71 | 26.66 | 139 | 0.86 |
| 647 | 6.23 | 34.54 | 27.18 | 90 | 400 | 8.86 | 34.64 | 26.88 | 118 | 0.99 |
| | | | | | 500 | 7.55 | 34.56 | 27.02 | 105 | 1.11 |
| 543a) | 7.12 | 34.54 | 27.06 | 101 | 600 | 6.61 | 34.54 | 27.13 | 94 | 1.22 |
| 652 | 6.24 | 34.55 | 27.19 | 89 | 700 | 5.94 | 34.54 | 27.22 | 86 | 1.32 |
| 761 | 5.53 | 34.54 | 27.27 | 81 | 800 | 5.28 | 34.54 | 27.30 | 78 | 1.41 |
| 816 | 5.18 | 34.52 | 27.30 | 79 | 1000 | 4.25 | 34.56 | 27.43 | 66 | 1.57 |
| 870 | 4.89 | 34.54 | 27.35 | 74 | 1200 | 3.53 | 34.57 | 27.51 | 58 | 1.72 |
| 925 | 4.62 | 34.54 | 27.38 | 71 | 1500 | 2.89 | 34.60 | 27.60 | 50 | 1.91 |
| 979 | 4.34 | 34.56 | 27.42 | 67 | 2000 | 2.15 | 34.64 | 27.69 | 41 | 2.18 |
| 1034 | 4.10 | 34.55 | 27.44 | 65 | | | | | | |
| 1090 | 3.90 | 34.57 | 27.48 | 62 | | | | | | |
| 1313 | 3.21 | 34.59 | 27.56 | 54 | | | | | | |
| 1656 | 2.64 | 34.61 | 27.63 | 47 | | | | | | |
| 2248 | 1.88 | 34.65 | 27.72 | 38 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 25.35°C, not used in interpolation.

44 USS MARYSVILLE; May 19, 1952; 1934, 1823 GCT; 16°24'N, 100°32'W; sounding, 2055 fm; wind, 310°, force 2; weather, cloudy; sea, slight; wire angle, 06°, 10°.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 0 | 28.69 | 34.65 | 21.93 | 590 | 0 | 28.69 | 34.65 | 21.93 | 590 | 0.00 |
| 10 | 28.32 | 34.63 | 22.03 | 580 | 10 | 28.32 | 34.63 | 22.03 | 580 | 0.06 |
| 25 | 26.80 | 34.44 | 22.38 | 547 | 20 | 27.48 | 34.44 | 22.16 | 567 | 0.12 |
| 49 | 22.54 | 34.51 | 23.71 | 419 | 30 | 26.45 | 34.45 | 22.50 | 535 | 0.17 |
| 78 | 16.52 | 34.72 | 25.43 | 256 | 50 | 22.25 | 34.51 | 23.80 | 411 | 0.27 |
| 117 | 13.16 | 34.83 | 26.25 | 178 | 75 | 17.00 | 34.69 | 25.30 | 269 | 0.35 |
| 156 | 12.43 | 34.85 | 26.41 | 163 | 100 | 14.04 | 34.80 | 26.04 | 198 | 0.41 |
| 194 | 11.95 | 34.81 | 26.47 | 157 | 150 | 12.55 | 34.85 | 26.38 | 165 | 0.50 |
| 290 | 10.93 | 34.76 | 26.62 | 143 | 200 | 11.88 | 34.81 | 26.48 | 156 | 0.59 |
| 387 | 9.71 | 34.69 | 26.78 | 128 | 250 | 11.35 | 34.78 | 26.56 | 148 | 0.66 |
| 482 | 7.93 | 34.58 | 26.98 | 109 | 300 | 10.80 | 34.75 | 26.64 | 141 | 0.74 |
| 582 | 6.95 | 34.57 | 27.11 | 96 | 400 | 9.51 | 34.68 | 26.80 | 125 | 0.88 |
| | | | | | 500 | 7.75 | 34.59 | 27.01 | 106 | 1.00 |
| 485a) | 7.97 | 34.60 | 26.98 | 108 | 600 | 6.76 | 34.57 | 27.13 | 94 | 1.11 |
| 580 | 6.94 | 34.58 | 27.12 | 96 | 700 | 6.02 | 34.57 | 27.23 | 85 | 1.21 |
| 673 | 6.17 | 34.58 | 27.22 | 86 | 800 | 5.52 | 34.56 | 27.29 | 80 | 1.30 |
| 721 | 5.88 | 34.57 | 27.25 | 83 | 1000 | 4.42 | 34.56 | 27.41 | 67 | 1.47 |
| 769 | 5.65 | 34.55 | 27.26 | 82 | 1200 | 3.74 | 34.55 | 27.48 | 61 | 1.62 |
| 817 | 5.42 | 34.56 | 27.30 | 78 | 1500 | (3.23) | (34.58) | (27.55) | (55) | (1.82) |
| 864 | 5.12 | 34.57 | 27.34 | 74 | | | | | | |
| 912 | 4.87 | 34.56 | 27.36 | 72 | | | | | | |
| 960 | 4.61 | 34.57 | 27.40 | 69 | | | | | | |
| 1155 | 3.84 | 34.55 | 27.47 | 62 | | | | | | |
| 1447 | 3.31 | 34.58 | 27.54 | 55 | | | | | | |
| 1921 | - | 34.66 | | | | | | | | |

45 USS MARYSVILLE; May 20, 1952; 0422 GCT; 16°38'N, 100°04'W; sounding, 700 fm; wind, 330°, force 2; weather, cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.6 | 34.70 | 21.32 | 649 | 0 | 30.6 | 34.70 | 21.32 | 649 | 0.00 |
| 10 | 28.85 | 34.70 | 21.91 | 592 | 10 | 28.85 | 34.70 | 21.91 | 592 | 0.06 |
| 42 | 21.70 | 34.51 | 23.95 | 397 | 20 | 27.70 | 34.65 | 22.25 | 559 | 0.12 |
| 84 | 14.97 | 34.79 | 25.84 | 217 | 30 | 25.80 | 34.57 | 22.79 | 507 | 0.17 |
| 126 | 13.20 | 34.87 | 26.27 | 176 | 50 | 20.60 | 34.52 | 24.26 | 367 | 0.26 |
| 168 | 12.57 | 34.87 | 26.40 | 164 | 75 | 16.10 | 34.65 | 25.47 | 252 | 0.34 |
| 209 | 12.14 | 34.83 | 26.45 | 159 | 100 | 13.84 | 34.78 | 26.07 | 195 | 0.40 |
| 416 | 9.16 | 34.65 | 26.84 | 122 | 150 | 12.82 | 34.88 | 26.35 | 168 | 0.49 |
| 622 | 6.65 | 34.59 | 27.16 | 91 | 200 | 12.24 | 34.84 | 26.44 | 160 | 0.57 |
| 726 | 6.01 | 34.58 | 27.24 | 84 | 250 | 11.62 | 34.79 | 26.52 | 153 | 0.65 |
| 829 | 5.45 | 34.56 | 27.29 | 79 | 300 | 10.95 | 34.74 | 26.60 | 144 | 0.73 |
| 882 | 5.19 | 34.56 | 27.33 | 76 | 400 | 9.42 | 34.66 | 26.80 | 125 | 0.87 |
| 934 | 4.96 | 34.56 | 27.35 | 73 | 500 | 7.88 | 34.62 | 27.01 | 105 | 1.00 |
| 1038 | 4.65 | 34.55 | 27.38 | 71 | 600 | 6.84 | 34.59 | 27.14 | 94 | 1.10 |
| 1250 | 3.80 | 34.58 | 27.49 | 60 | 700 | 6.18 | 34.58 | 27.22 | 86 | 1.20 |
| | | | | | 800 | 5.61 | 34.57 | 27.28 | 80 | 1.30 |
| | | | | | 1000 | 4.77 | 34.55 | 27.37 | 72 | 1.47 |
| | | | | | 1200 | 4.02 | 34.57 | 27.46 | 63 | 1.63 |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

USS MARYSVILLE; May 22, 1952; 2235, 2116 GCT; 15°57'N, 99°35'W; sounding, 2300 fm; wind, 150°, force 1; weather, cloudy; sea, moderate; wire angle, 00°, 00°. 46

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.55 | 34.36 | 21.42 | 639 | 0 | 29.55 | 34.36 | 21.42 | 639 | 0.00 |
| 10 | 29.51 | 34.37 | 21.44 | 637 | 10 | 29.51 | 34.37 | 21.44 | 637 | 0.06 |
| 25 | 28.96 | 34.62 | 21.81 | 601 | 20 | 29.27 | 34.55 | 21.66 | 616 | 0.13 |
| 49 | 23.48 | 34.42 | 23.38 | 451 | 30 | 28.85 | 34.62 | 21.85 | 597 | 0.19 |
| 74 | 16.40 | 34.70 | 25.44 | 254 | 50 | 22.90 | 34.42 | 23.54 | 435 | 0.29 |
| 98 | 13.96 | 34.83 | 26.08 | 194 | 75 | 16.20 | 34.70 | 25.49 | 250 | 0.38 |
| 148 | 12.60 | 34.83 | 26.36 | 167 | 100 | 13.86 | 34.83 | 26.10 | 192 | 0.43 |
| 196 | 11.76 | 34.78 | 26.48 | 156 | 150 | 12.55 | 34.83 | 26.37 | 167 | 0.52 |
| 294 | 10.50 | 34.71 | 26.66 | 139 | 200 | 11.70 | 34.79 | 26.50 | 154 | 0.61 |
| 392 | 8.90 | 34.66 | 26.89 | 117 | 250 | 11.04 | 34.75 | 26.59 | 145 | 0.68 |
| 489 | 7.57 | 34.60 | 27.04 | 103 | 300 | 10.40 | 34.71 | 26.68 | 137 | 0.76 |
| 586 | 6.72 | 34.57 | 27.14 | 93 | 400 | 8.75 | 34.66 | 26.91 | 115 | 0.89 |
| | | | | | 500 | 7.46 | 34.59 | 27.05 | 102 | 1.01 |
| 519a) | 7.29 | 34.58 | 27.07 | 100 | 600 | 6.64 | 34.55 | 27.13 | 94 | 1.11 |
| 622 | 6.45 | 34.54 | 27.15 | 92 | 700 | 5.98 | 34.54 | 27.21 | 86 | 1.21 |
| 725 | 5.80 | 34.54 | 27.24 | 84 | 800 | 5.36 | 34.54 | 27.29 | 79 | 1.31 |
| 778 | 5.48 | 34.54 | 27.28 | 81 | 1000 | 4.51 | 34.55 | 27.40 | 69 | 1.47 |
| 829 | 5.22 | 34.54 | 27.31 | 78 | 1200 | 3.77 | 34.56 | 27.48 | 61 | 1.62 |
| 881 | 5.04 | 34.54 | 27.33 | 76 | 1500 | 3.03 | 34.60 | 27.59 | 51 | 1.82 |
| 933 | 4.77 | 34.54 | 27.36 | 73 | | | | | | |
| 984 | 4.59 | 34.55 | 27.39 | 70 | | | | | | |
| 1036 | 4.35 | 34.57 | 27.43 | 66 | | | | | | |
| 1244 | 3.63 | 34.56 | 27.50 | 60 | | | | | | |
| 1555 | 2.85 | 34.61 | 27.61 | 49 | | | | | | |
| 1873 | 2.35 | 34.63 | 27.67 | 43 | | | | | | |

USS MARYSVILLE; May 23, 1952; 1223, 1103 GCT; 14°25'N, 98°58'W; sounding, 1875 fm; wind, 060°, force 2; weather, missing; sea, missing; wire angle, 00°, 08°. 47

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.37 | 34.16 | 21.66 | 615 | 0 | 28.37 | 34.16 | 21.66 | 615 | 0.00 |
| 10 | 28.42 | 34.15 | 21.64 | 618 | 10 | 28.42 | 34.15 | 21.64 | 618 | 0.06 |
| 25 | 28.50 | 34.34 | 21.76 | 606 | 20 | 28.46 | 34.28 | 21.72 | 609 | 0.12 |
| 50 | 26.06 | 34.47 | 22.64 | 522 | 30 | 28.20 | 34.38 | 21.88 | 594 | 0.18 |
| 74 | 19.13 | 34.56 | 24.67 | 328 | 50 | 26.06 | 34.47 | 22.64 | 522 | 0.30 |
| 99 | 15.49 | 34.77 | 25.70 | 230 | 75 | 18.90 | 34.57 | 24.74 | 322 | 0.40 |
| 147 | 12.83 | 34.84 | 26.32 | 171 | 100 | 15.25 | 34.77 | 25.76 | 225 | 0.47 |
| 195 | 12.00 | 34.83 | 26.48 | 156 | 150 | 12.80 | 34.84 | 26.33 | 170 | 0.57 |
| 291 | 10.73 | 34.76 | 26.66 | 139 | 200 | 11.94 | 34.83 | 26.49 | 155 | 0.65 |
| 398 | 9.12 | 34.65 | 26.84 | 121 | 250 | 11.27 | 34.80 | 26.59 | 146 | 0.73 |
| 485 | 7.68 | 34.59 | 27.02 | 105 | 300 | 10.62 | 34.75 | 26.67 | 138 | 0.81 |
| 582 | 6.80 | 34.57 | 27.13 | 94 | 400 | 9.09 | 34.65 | 26.85 | 121 | 0.94 |
| | | | | | 500 | 7.46 | 34.58 | 27.04 | 103 | 1.06 |
| 510a) | 7.34 | 34.58 | 27.06 | 101 | 600 | 6.61 | 34.57 | 27.15 | 92 | 1.17 |
| 614 | 6.42 | 34.58 | 27.19 | 89 | 700 | 5.82 | 34.57 | 27.26 | 82 | 1.27 |
| 717 | 5.70 | 34.57 | 27.27 | 81 | 800 | 5.24 | 34.57 | 27.33 | 76 | 1.35 |
| 770 | 5.39 | 34.57 | 27.31 | 77 | 1000 | 4.39 | 34.57 | 27.42 | 66 | 1.51 |
| 821 | 5.14 | 34.57 | 27.34 | 74 | 1200 | 3.77 | 34.58 | 27.50 | 60 | 1.66 |
| 873 | 4.94 | 34.62u | | | 1500 | 3.08 | 34.60 | 27.58 | 52 | 1.86 |
| 925 | 4.72 | 34.57 | 27.39 | 70 | | | | | | |
| 976 | 4.49 | 34.56 | 27.41 | 68 | | | | | | |
| 1029 | 4.28 | 34.57 | 27.44 | 65 | | | | | | |
| 1236 | 3.69 | 34.58 | 27.51 | 59 | | | | | | |
| 1562 | 2.95 | 34.65 | 27.63 | 47 | | | | | | |
| 1865 | 2.34 | 34.57 | 27.62 | 48 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

USNEL SHUTTLE

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

48 USS MARYSVILLE; May 24, 1952; 0208, 0053 GCT; 12°51'N, 98°19'W; sounding, 2000 fm; wind, 110°, force 3; weather, cloudy; sea, rough; wire angle, 12°, 08°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.29 | 33.48 | 20.85 | 693 | 0 | 29.29 | 33.48 | 20.85 | 693 | 0.00 |
| 10 | 29.34 | 33.49 | 20.84 | 694 | 10 | 29.34 | 33.49 | 20.84 | 694 | 0.07 |
| 24 | 29.13 | 33.84 | 21.17 | 662 | 20 | 29.21 | 33.75 | 21.08 | 671 | 0.14 |
| 49 | 26.96 | 34.04 | 22.03 | 580 | 30 | 29.00 | 33.89 | 21.25 | 655 | 0.20 |
| 73 | 22.05 | 34.43 | 23.79 | 412 | 50 | 26.90 | 34.04 | 22.05 | 578 | 0.33 |
| 97 | 16.03 | 34.77 | 25.58 | 241 | 75 | 21.32 | 34.52 | 24.06 | 386 | 0.45 |
| 145 | 12.61 | 34.83 | 26.36 | 168 | 100 | 15.60 | 34.78 | 25.69 | 231 | 0.53 |
| 194 | 11.93 | 34.81 | 26.47 | 157 | 150 | 12.54 | 34.83 | 26.37 | 166 | 0.63 |
| 290 | 10.71 | 34.73 | 26.64 | 141 | 200 | 11.84 | 34.81 | 26.49 | 155 | 0.71 |
| 386 | 9.02 | 34.60 | 26.82 | 124 | 250 | 11.23 | 34.76 | 26.57 | 148 | 0.79 |
| 484 | 7.62 | 34.57 | 27.01 | 105 | 300 | 10.52 | 34.72 | 26.66 | 139 | 0.86 |
| 581 | 6.48 | 34.56 | 27.16 | 91 | 400 | 8.79 | 34.60 | 26.86 | 120 | 1.00 |
| | | | | | 500 | 7.48 | 34.58 | 27.04 | 103 | 1.12 |
| 535a) | 7.08 | 34.56 | 27.08 | 99 | 600 | 6.34 | 34.56 | 27.18 | 89 | 1.22 |
| 642 | 6.09 | 34.56 | 27.21 | 86 | 700 | 5.73 | 34.55 | 27.25 | 83 | 1.32 |
| 802 | 5.14 | 34.52 | 27.30 | 78 | 800 | 5.17 | 34.52 | 27.30 | 79 | 1.41 |
| 857 | 4.88 | 34.54 | 27.35 | 74 | 1000 | 4.24 | 34.56 | 27.43 | 66 | 1.57 |
| 911 | 4.61 | 34.55 | 27.38 | 70 | 1200 | 3.57 | 34.57 | 27.51 | 58 | 1.72 |
| 964 | 4.38 | 34.55 | 27.41 | 68 | 1500 | 2.89 | 34.60 | 27.60 | 50 | 1.91 |
| 1018 | 4.17 | 34.56 | 27.44 | 65 | 2000 | (1.99) | (34.63) | (27.70) | (41) | (2.18) |
| 1071 | 3.97 | 34.56 | 27.46 | 63 | | | | | | |
| 1125 | 3.79 | 34.58 | 27.50 | 60 | | | | | | |
| 1287 | 3.31 | 34.57 | 27.53 | 56 | | | | | | |
| 1611 | 2.70 | 34.61 | 27.62 | 48 | | | | | | |
| 1935 | 2.12 | 34.63 | 27.69 | 42 | | | | | | |

49 USS MARYSVILLE; May 24, 1952; 1555, 1418, 1503 GCT; 11°15'N, 97°35'W; sounding, 2200 fm; wind, 110°, force 4; weather, cloudy; sea, moderate; wire angle, missing, 12°, 15°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.43 | 33.84 | 21.07 | 672 | 0 | 29.43 | 33.84 | 21.07 | 672 | 0.00 |
| 10 | 29.39 | 33.85 | 21.09 | 670 | 10 | 29.39 | 33.85 | 21.09 | 670 | 0.07 |
| 26 | 28.80 | 34.07 | 21.45 | 635 | 20 | 29.37 | 33.96 | 21.18 | 662 | 0.13 |
| 51 | 24.66 | 34.42 | 23.03 | 485 | 30 | 28.45 | 34.14 | 21.62 | 619 | 0.20 |
| 75 | 16.47 | 34.70 | 25.43 | 256 | 50 | 24.70 | 34.41 | 23.01 | 487 | 0.31 |
| 100 | 16.79 | 34.82 | 25.44 | 254 | 75 | 16.47 | 34.70 | 25.43 | 256 | 0.40 |
| 150 | 12.16 | 34.78 | 26.41 | 163 | 100 | 16.79 | 34.82 | 25.44 | 254 | 0.47 |
| 201 | 11.61 | 34.78 | 26.51 | 153 | 150 | 12.16 | 34.78 | 26.41 | 163 | 0.57 |
| 300 | 10.24 | 34.70 | 26.70 | 136 | 200 | 11.63 | 34.78 | 26.51 | 153 | 0.65 |
| 400 | 8.75 | 34.63 | 26.89 | 117 | 250 | 10.93 | 34.74 | 26.60 | 144 | 0.73 |
| 500 | 7.35 | 34.60 | 27.08 | 100 | 300 | 10.24 | 34.70 | 26.70 | 136 | 0.80 |
| 601 | 6.43 | 34.60 | 27.20 | 88 | 400 | 8.75 | 34.63 | 26.89 | 117 | 0.94 |
| | | | | | 500 | 7.35 | 34.60 | 27.08 | 100 | 1.05 |
| 471a) | 7.68 | 34.62 | 27.04 | 103 | 600 | 6.44 | 34.60 | 27.20 | 88 | 1.16 |
| 565 | 6.75 | 34.60 | 27.16 | 92 | 700 | 5.78 | 34.59 | 27.28 | 80 | 1.25 |
| 708 | 5.73 | 34.58 | 27.28 | 80 | 800 | 5.27 | 34.57 | 27.32 | 76 | 1.34 |
| 756 | 5.52 | 34.58 | 27.30 | 78 | 1000 | 4.30 | 34.59 | 27.45 | 64 | 1.50 |
| 803 | 5.24 | 34.56 | 27.32 | 76 | 1200 | 3.55 | 34.60 | 27.54 | 56 | 1.63 |
| 851 | 4.96 | 34.56 | 27.35 | 73 | 1500 | 2.88 | 34.64 | 27.63 | 47 | 1.82 |
| 898 | 4.73 | 34.57 | 27.39 | 70 | | | | | | |
| 946 | 4.51 | 34.59 | 27.43 | 66 | | | | | | |
| 994 | 4.33 | 34.61 | 27.46 | 63 | | | | | | |
| 1137 | 3.75 | 34.60 | 27.52 | 58 | | | | | | |
| 1427 | 3.04 | 34.61 | 27.59 | 51 | | | | | | |
| 1819 | 2.34 | 34.65 | 27.69 | 42 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| USS MARYSVILLE; May 25, 1952; 0534, 0420 GCT; 9°43'N, 96°56'W; sounding, 2150 fm; wind, 140°, force 1; weather, cloudy; sea, calm; wire angle, 00°, 06°. | | | | | | | | | | 50 |
| 0 | 29.45 | 33.62 | 20.90 | 689 | 0 | 29.45 | 33.62 | 20.90 | 689 | 0.00 |
| 10 | 29.40 | 33.80 | 21.05 | 674 | 10 | 29.40 | 33.80 | 21.05 | 674 | 0.07 |
| 25 | 27.43 | 34.16 | 21.97 | 586 | 20 | 27.95 | 34.07 | 21.73 | 609 | 0.13 |
| 50 | 20.91 | 34.45 | 24.12 | 380 | 30 | 25.35 | 34.21 | 22.66 | 520 | 0.19 |
| 74 | 14.67 | 34.79 | 25.90 | 211 | 50 | 20.91 | 34.45 | 24.12 | 380 | 0.28 |
| 99 | 13.29 | 34.88 | 26.26 | 177 | 75 | 14.60 | 34.80 | 25.92 | 209 | 0.35 |
| 148 | 12.32 | 34.82 | 26.41 | 163 | 100 | 13.27 | 34.88 | 26.26 | 177 | 0.40 |
| 197 | 11.80 | 34.78 | 26.48 | 156 | 150 | 12.31 | 34.82 | 26.41 | 163 | 0.49 |
| 294 | 10.44 | 34.71 | 26.67 | 138 | 200 | 11.75 | 34.78 | 26.48 | 156 | 0.57 |
| 390 | 8.78 | 34.65 | 26.90 | 116 | 250 | 11.09 | 34.74 | 26.58 | 147 | 0.65 |
| 485 | 7.45 | 34.60 | 27.06 | 101 | 300 | 10.34 | 34.71 | 26.69 | 136 | 0.72 |
| 583 | 6.48 | 34.56 | 27.16 | 91 | 400 | 8.61 | 34.64 | 26.92 | 114 | 0.86 |
| | | | | | 500 | 7.28 | 34.59 | 27.08 | 99 | 0.97 |
| 484a) | 7.46 | 34.59 | 27.05 | 102 | 600 | 6.38 | 34.57 | 27.19 | 89 | 1.07 |
| 580 | 6.57 | 34.58 | 27.17 | 91 | 700 | 5.64 | 34.56 | 27.27 | 81 | 1.17 |
| 725 | 5.44 | 34.56 | 27.30 | 79 | 800 | 5.02 | 34.56 | 27.35 | 74 | 1.25 |
| 773 | 5.16 | 34.56 | 27.33 | 75 | 1000 | 4.17 | 34.56 | 27.44 | 65 | 1.41 |
| 822 | 4.92 | 34.55 | 27.35 | 74 | 1200 | 3.53 | 34.60 | 27.54 | 56 | 1.55 |
| 870 | 4.65 | 34.56 | 27.39 | 70 | 1500 | 2.90 | 34.62 | 27.61 | 49 | 1.74 |
| 919 | 4.44 | 34.54 | 27.40 | 69 | | | | | | |
| 967 | 4.27 | 34.56 | 27.43 | 66 | | | | | | |
| 1016 | 4.11 | 34.56 | 27.45 | 64 | | | | | | |
| 1162 | 3.63 | 34.60 | 27.53 | 57 | | | | | | |
| 1456 | 2.97 | 34.61 | 27.60 | 50 | | | | | | |
| 1850 | 2.34 | 34.65 | 27.69 | 42 | | | | | | |
| USS MARYSVILLE; May 25, 1952; 1941, 1825 GCT; 8°16'N, 96°09'W; sounding, 2030 fm; wind, 280°, force 1; weather, cloudy; sea, rough; wire angle, 45°, 23°. | | | | | | | | | | 51 |
| 0 | 28.98 | 33.21 | 20.75 | 703 | 0 | 28.98 | 33.21 | 20.75 | 703 | 0.00 |
| 9 | 28.78 | 33.44 | 20.99 | 680 | 10 | 28.78 | 33.45 | 21.00 | 679 | 0.07 |
| 21 | 28.67 | 33.57 | 21.12 | 667 | 20 | 28.67 | 33.57 | 21.12 | 667 | 0.14 |
| 41 | 26.40 | 33.96 | 22.15 | 569 | 30 | 28.50 | 33.71 | 21.28 | 652 | 0.20 |
| 61 | 20.16b) | 34.46 | 24.33 | 361 | 50 | 24.35 | 34.21 | 22.96 | 491 | 0.32 |
| 80 | 15.99 | 34.70 | 25.54 | 245 | 75 | 16.90 | 34.69 | 25.32 | 266 | 0.41 |
| 117 | 12.45 | 34.66 | 26.26 | 177 | 100 | 13.75 | 34.67 | 26.00 | 201 | 0.47 |
| 151 | 11.36 | 34.66 | 26.46 | 157 | 150 | 11.37 | 34.66 | 26.46 | 158 | 0.56 |
| 216 | 10.86 | 34.75 | 26.63 | 142 | 200 | 10.96 | 34.74 | 26.60 | 145 | 0.64 |
| 286 | 10.30 | 34.72 | 26.70 | 135 | 250 | 10.60 | 34.74 | 26.66 | 139 | 0.71 |
| 372 | 9.34 | 34.67 | 26.82 | 123 | 300 | 10.15 | 34.72 | 26.73 | 133 | 0.78 |
| 472 | 8.02 | 34.62 | 26.99 | 107 | 400 | 9.00 | 34.67 | 26.88 | 118 | 0.92 |
| | | | | | 500 | 7.72 | 34.62 | 27.04 | 103 | 1.04 |
| 670 | 6.11 | 34.55 | 27.20 | 87 | 600 | 6.73 | 34.56 | 27.13 | 94 | 1.14 |
| 784 | 5.34 | 34.55 | 27.30 | 78 | 700 | 5.88 | 34.55 | 27.23 | 85 | 1.24 |
| 842 | 5.03 | 34.56 | 27.34 | 74 | 800 | 5.25 | 34.56 | 27.32 | 76 | 1.33 |
| 900 | 4.81 | 34.56 | 27.37 | 72 | 1000 | 4.40 | 34.56 | 27.42 | 67 | 1.49 |
| 958 | 4.53 | 34.56 | 27.40 | 69 | 1200 | 3.78 | 34.59 | 27.50 | 59 | 1.64 |
| 1017 | 4.34 | 34.60u | | | 1500 | 2.98 | 34.62 | 27.61 | 49 | 1.83 |
| 1075 | 4.13 | 34.56 | 27.44 | 65 | | | | | | |
| 1133 | 3.98 | 34.58 | 27.48 | 62 | | | | | | |
| 1191 | 3.80 | 34.59 | 27.50 | 59 | | | | | | |
| 1248 | 3.66 | 34.60 | 27.52 | 57 | | | | | | |
| 1365 | 3.27 | 34.59 | 27.55 | 54 | | | | | | |
| 1716 | 2.60 | 34.63 | 27.65 | 45 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 20.02°C, not used in interpolation.

USNEL SHUTTLE

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| **52** | USS MARYSVILLE; May 26, 1952; 1023, 0904 GCT; 6°47'N, 95°13'W; sounding, 2005 fm; wind, 240°, force 1; weather, cloudy; sea, moderate; wire angle, 08°, 20°. | | | | | | | | | |
| 0 | 28.36 | 32.49 | 20.42 | 735 | 0 | 28.36 | 32.49 | 20.42 | 735 | 0.00 |
| 12 | 28.37 | 32.48 | 20.40 | 736 | 10 | 28.37 | 32.48 | 20.40 | 736 | 0.07 |
| 28 | 28.47 | 32.59 | 20.45 | 731 | 20 | 28.45 | 32.50 | 20.39 | 737 | 0.15 |
| 55 | 24.44 | 34.14 | 22.88 | 499 | 30 | 28.44 | 32.65 | 20.51 | 726 | 0.22 |
| 81 | 16.09 | 34.67 | 25.49 | 250 | 50 | 24.90 | 33.84 | 22.52 | 534 | 0.35 |
| 108 | 14.02 | 34.65 | 25.93 | 208 | 75 | 17.25 | 34.67 | 25.22 | 276 | 0.45 |
| 162 | 11.75 | 34.67 | 26.40 | 164 | 100 | 14.39 | 34.66 | 25.86 | 215 | 0.51 |
| 216 | 10.84 | 34.69 | 26.58 | 146 | 150 | 12.20 | 34.66 | 26.31 | 173 | 0.61 |
| 321 | 9.93 | 34.69 | 26.74 | 131 | 200 | 11.07 | 34.68 | 26.53 | 151 | 0.69 |
| 428 | 8.87 | 34.66 | 26.89 | 117 | 250 | 10.54 | 34.69 | 26.64 | 141 | 0.77 |
| 536 | 7.42 | 34.58 | 27.05 | 102 | 300 | 10.12 | 34.69 | 26.71 | 134 | 0.84 |
| 644 | 6.36 | 34.58 | 27.20 | 88 | 400 | 9.18 | 34.67 | 26.85 | 121 | 0.97 |
| | | | | | 500 | 7.88 | 34.60 | 27.00 | 107 | 1.10 |
| 489a) | 8.03 | 34.60 | 26.98 | 109 | 600 | 6.83 | 34.59 | 27.14 | 93 | 1.21 |
| 588 | 6.94 | 34.60 | 27.13 | 94 | 700 | 5.91 | 34.58 | 27.25 | 83 | 1.30 |
| 736 | 5.61 | 34.58 | 27.29 | 79 | 800 | 5.14 | 34.54 | 27.32 | 77 | 1.39 |
| 787 | 5.26 | 34.54 | 27.30 | 78 | 1000 | 4.24 | 34.54 | 27.42 | 67 | 1.55 |
| 836 | 4.90 | 34.52 | 27.33 | 76 | 1200 | 3.57 | 34.58 | 27.52 | 58 | 1.70 |
| 886 | 4.72 | 34.53 | 27.36 | 73 | 1500 | 2.92 | 34.59 | 27.59 | 51 | 1.89 |
| 935 | 4.50 | 34.52 | 27.37 | 71 | | | | | | |
| 985 | 4.32 | 34.55 | 27.42 | 67 | | | | | | |
| 1035 | 4.02 | 34.54 | 27.44 | 65 | | | | | | |
| 1185 | 3.62 | 34.58 | 27.51 | 58 | | | | | | |
| 1489 | 2.94 | 34.59 | 27.59 | 51 | | | | | | |
| 1849 | 2.41 | 34.60 | 27.64 | 46 | | | | | | |
| **53** | USS MARYSVILLE; May 26, 1952; 2330, 2232 GCT; 5°26'N, 94°24'W; sounding, 1930 fm; wind, 180°, force 4; weather, partly cloudy; sea, rough; wire angle, 37°, 43°. | | | | | | | | | |
| 0 | 28.56 | 33.34 | 20.99 | 680 | 0 | 28.56 | 33.34 | 20.99 | 680 | 0.00 |
| 11 | 28.53 | 33.34 | 21.00 | 679 | 10 | 28.53 | 33.34 | 21.00 | 679 | 0.07 |
| 28 | 28.43 | 33.33 | 21.02 | 677 | 20 | 28.48 | 33.53 | 21.16 | 664 | 0.14 |
| 56 | 25.52 | 34.88 | 23.11 | 477 | 30 | 28.43 | 33.33 | 21.02 | 677 | 0.20 |
| 84 | 16.93 | 34.87 | 25.45 | 254 | 50 | 26.30 | 34.84 | 22.84 | 503 | 0.32 |
| 112 | 14.59 | 34.94 | 26.03 | 198 | 75 | 19.40 | 34.87 | 24.84 | 312 | 0.42 |
| 167 | 12.62 | 34.87 | 26.39 | 165 | 100 | 15.30 | 34.90 | 25.85 | 216 | 0.49 |
| 222 | 11.83 | 34.83 | 26.51 | 153 | 150 | 12.97 | 34.90 | 26.34 | 169 | 0.59 |
| 336 | 10.10 | 34.76 | 26.77 | 129 | 200 | 12.17 | 34.84 | 26.45 | 159 | 0.67 |
| 448 | 8.79 | 34.68 | 26.92 | 114 | 250 | 11.42 | 34.82 | 26.58 | 147 | 0.75 |
| 569 | 6.97 | 34.57 | 27.11 | 97 | 300 | 10.68 | 34.78 | 26.68 | 137 | 0.83 |
| 695 | 5.95 | 34.57 | 27.24 | 84 | 400 | 9.32 | 34.72 | 26.87 | 119 | 0.96 |
| | | | | | 500 | 7.89 | 34.62 | 27.01 | 105 | 1.08 |
| 483a) | 8.17 | 34.64 | 26.99 | 108 | 600 | 6.68 | 34.58 | 27.15 | 92 | 1.19 |
| 584 | 6.78 | 34.59 | 27.15 | 93 | 700 | 5.91 | 34.57 | 27.25 | 83 | 1.29 |
| 740 | 5.60 | 34.58 | 27.29 | 79 | 800 | 5.34 | 34.58 | 27.32 | 76 | 1.38 |
| 793 | 5.37 | 34.58 | 27.32 | 76 | 1000 | 4.44 | 34.58 | 27.43 | 66 | 1.54 |
| 845 | 5.09 | 34.57 | 27.35 | 74 | 1200 | 3.77 | 34.59 | 27.51 | 59 | 1.68 |
| 898 | 4.85 | 34.56 | 27.37 | 72 | 1500 | 3.07 | 34.61 | 27.59 | 51 | 1.88 |
| 951 | 4.62 | 34.58 | 27.41 | 68 | | | | | | |
| 1004 | 4.42 | 34.58 | 27.43 | 66 | | | | | | |
| 1058 | 4.17 | 34.57 | 27.45 | 64 | | | | | | |
| 1112 | 3.97 | 34.59 | 27.49 | 61 | | | | | | |
| 1222 | 3.72 | 34.59 | 27.51 | 58 | | | | | | |
| 1561 | 2.92 | 34.61 | 27.60 | 50 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

USS MARYSVILLE; May 27, 1952; 1316, 1153 GCT; 4°28'N, 93°48'W; sounding, 1850 fm; wind, 200°, force 4; weather, cloudy; sea, rough; wire angle, 22°, 30°. 54

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.6 | 33.08 | 21.10 | 669 | 0 | 27.6 | 33.08 | 21.10 | 669 | 0.00 |
| 11 | 27.6 | 33.08 | 21.10 | 669 | 10 | 27.6 | 33.08 | 21.10 | 669 | 0.07 |
| 26 | 27.6 | 34.17 | 21.92 | 590 | 20 | 27.6 | 33.35 | 21.31 | 649 | 0.13 |
| 52 | 24.33 | 34.86 | 23.46 | 444 | 30 | 27.10 | 34.35 | 22.22 | 562 | 0.19 |
| 78 | 18.66 | 34.87 | 25.03 | 294 | 50 | 24.65 | 34.86 | 23.36 | 453 | 0.30 |
| 104 | 16.36 | 34.93 | 25.63 | 237 | 75 | 19.15 | 34.87 | 24.90 | 306 | 0.39 |
| 155 | 13.86 | 34.96 | 26.20 | 182 | 100 | 16.92 | 34.92 | 25.49 | 250 | 0.46 |
| 207 | 12.95 | 34.90 | 26.34 | 169 | 150 | 14.02 | 34.96 | 26.17 | 185 | 0.57 |
| 309 | 11.17 | 34.78 | 26.59 | 145 | 200 | 13.05 | 34.91 | 26.33 | 170 | 0.66 |
| 415 | 8.92 | 34.66 | 26.88 | 118 | 250 | 12.19 | 34.85 | 26.45 | 158 | 0.75 |
| 524 | 7.27 | 34.61 | 27.09 | 98 | 300 | 11.31 | 34.79 | 26.57 | 147 | 0.83 |
| 633 | 6.55 | 34.59 | 27.18 | 90 | 400 | 9.21 | 34.68 | 26.85 | 121 | 0.97 |
| | | | | | 500 | 7.62 | 34.62 | 27.05 | 102 | 1.09 |
| 577a) | 6.76 | 34.57 | 27.13 | 94 | 600 | 6.67 | 34.59 | 27.16 | 91 | 1.19 |
| 694 | 5.96 | 34.56 | 27.23 | 85 | 700 | 5.93 | 34.57 | 27.24 | 84 | 1.29 |
| 872 | 4.97 | 34.55 | 27.34 | 74 | 800 | 5.36 | 34.56 | 27.31 | 78 | 1.38 |
| 931 | 4.77 | 34.56 | 27.37 | 71 | 1000 | 4.52 | 34.56 | 27.40 | 69 | 1.55 |
| 991 | 4.54 | 34.57 | 27.41 | 68 | 1200 | 3.88 | 34.58 | 27.49 | 61 | 1.70 |
| 1051 | 4.36 | 34.56 | 27.42 | 67 | 1500 | 3.03 | 34.60 | 27.59 | 51 | 1.90 |
| 1111 | 4.12 | 34.58 | 27.46 | 63 | | | | | | |
| 1171 | 4.00 | 34.58 | 27.47 | 62 | | | | | | |
| 1231 | 3.75 | 34.59 | 27.51 | 59 | | | | | | |
| 1292 | 3.62 | 34.57 | 27.50 | 59 | | | | | | |
| 1414 | 3.22 | 34.59 | 27.56 | 54 | | | | | | |
| 1791 | 2.45 | 34.62 | 27.65 | 45 | | | | | | |

USS MARYSVILLE; May 28, 1952; 1338, 1212 GCT; 6°08'N, 91°58'W; sounding, 2000 fm; wind, 260°, force 4; weather, rain; sea, rough; wire angle, 45°, 57°. 56

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.68 | 33.77 | 21.27 | 653 | 0 | 28.68 | 33.77 | 21.27 | 653 | 0.00 |
| 10 | 28.66 | 33.78 | 21.28 | 652 | 10 | 28.66 | 33.78 | 21.28 | 652 | 0.07 |
| 30 | 27.03 | 34.04 | 22.01 | 582 | 20 | 28.65 | 33.83 | 21.32 | 648 | 0.13 |
| 61 | 15.44 | 34.85 | 25.78 | 223 | 30 | 27.03 | 34.04 | 22.01 | 582 | 0.19 |
| 93 | 14.10 | 34.94 | 26.14 | 188 | 50 | 19.60 | 34.58 | 24.57 | 338 | 0.28 |
| 120 | 13.45 | 34.95 | 26.28 | 175 | 75 | 14.56 | 34.92 | 26.02 | 199 | 0.35 |
| 174 | 12.91 | 34.90 | 26.35 | 168 | 100 | 13.88 | 34.95 | 26.19 | 183 | 0.40 |
| 238 | 12.30 | 34.89 | 26.46 | 157 | 150 | 13.15 | 34.92 | 26.32 | 171 | 0.49 |
| 332 | 10.69 | 34.77 | 26.67 | 138 | 200 | 12.68 | 34.90 | 26.40 | 164 | 0.58 |
| 454 | 8.46 | 34.65 | 26.95 | 111 | 250 | 12.14 | 34.88 | 26.49 | 155 | 0.66 |
| 586 | 6.82 | 34.58 | 27.13 | 94 | 300 | 11.34 | 34.82 | 26.59 | 145 | 0.74 |
| 732 | 5.67 | 34.58 | 27.28 | 80 | 400 | 9.70 | 34.71 | 26.80 | 126 | 0.88 |
| | | | | | 500 | 7.91 | 34.62 | 27.01 | 106 | 1.01 |
| 375a) | 10.13 | 34.74 | 26.75 | 131 | 600 | 6.70 | 34.57 | 27.14 | 93 | 1.11 |
| 455 | 8.57 | 34.65 | 26.93 | 113 | 700 | 5.88 | 34.55 | 27.23 | 85 | 1.21 |
| 579 | 6.90 | 34.57 | 27.11 | 96 | 800 | 5.29 | 34.55 | 27.31 | 78 | 1.30 |
| 621 | 6.53 | 34.57 | 27.17 | 91 | 1000 | 4.53 | 34.58 | 27.42 | 67 | 1.47 |
| 664 | 6.16 | 34.55 | 27.20 | 88 | 1200 | 4.03 | 34.60 | 27.49 | 61 | 1.62 |
| 707 | 5.81 | 34.54 | 27.23 | 84 | | | | | | |
| 750 | 5.60 | 34.57 | 27.28 | 80 | | | | | | |
| 792 | 5.33 | 34.56 | 27.31 | 77 | | | | | | |
| 836 | 5.12 | 34.54 | 27.32 | 76 | | | | | | |
| 879 | 4.90 | 34.56 | 27.36 | 73 | | | | | | |
| 969 | 4.62 | 34.58 | 27.41 | 68 | | | | | | |
| 1237 | 3.93 | 34.60 | 27.50 | 60 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| USNEL SHUTTLE | OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 57 | USS MARYSVILLE; May 28-29, 1952; 2332, 0126 GCT; 7°12'N, 91°12'W; sounding, 1990 fm; wind, 280°, force 2; weather, cloudy; sea, moderate; wire angle, 40°, 27°. | | | | | | | | | | |
| | 0 | 28.96 | 33.54 | 21.00 | 679 | 0 | 28.96 | 33.54 | 21.00 | 679 | 0.00 |
| | 9 | 29.02 | 33.65 | 21.07 | 673 | 10 | 29.02 | 33.68 | 21.09 | 670 | 0.07 |
| | 48 | 15.80 | 34.81 | 25.67 | 233 | 20 | 28.10 | 34.01 | 21.64 | 618 | 0.13 |
| | 97 | 13.50 | 34.88 | 26.22 | 181 | 30 | 23.30 | 34.29 | 23.33 | 456 | 0.19 |
| | 145 | 12.61 | 34.86 | 26.38 | 165 | 50 | 15.70 | 34.82 | 25.70 | 230 | 0.25 |
| | 194 | 12.04 | 34.83 | 26.47 | 157 | 75 | 14.23 | 34.87 | 26.06 | 196 | 0.31 |
| | | | | | | 100 | 13.42 | 34.80 | 26.17 | 185 | 0.36 |
| | 293 | 10.78 | 34.74 | 26.63 | 142 | 150 | 12.57 | 34.86 | 26.39 | 165 | 0.45 |
| | 391 | 9.52 | 34.67 | 26.79 | 126 | 200 | 11.98 | 34.83 | 26.48 | 156 | 0.53 |
| | 489 | 8.12 | 34.61 | 26.97 | 110 | 250 | 11.34 | 34.79 | 26.57 | 148 | 0.61 |
| | 688 | 6.12 | 34.55 | 27.20 | 87 | 300 | 10.70 | 34.73 | 26.64 | 141 | 0.68 |
| | 793 | 5.44 | 34.56 | 27.30 | 79 | 400 | 9.39 | 34.67 | 26.82 | 124 | 0.82 |
| | 901 | 4.97 | 34.57 | 27.36 | 73 | 500 | 8.00 | 34.60 | 26.98 | 109 | 0.95 |
| | 1012 | 4.58 | 34.58 | 27.41 | 68 | 600 | 6.96 | 34.57 | 27.11 | 97 | 1.06 |
| | 1239 | 3.76 | 34.58 | 27.50 | 59 | 700 | 6.02 | 34.55 | 27.22 | 86 | 1.16 |
| | | | | | | 800 | 5.40 | 34.56 | 27.30 | 78 | 1.25 |
| | | | | | | 1000 | 4.62 | 34.58 | 27.41 | 68 | 1.42 |
| | | | | | | 1200 | 3.89 | 34.58 | 27.49 | 61 | 1.57 |
| 58 | USS MARYSVILLE; May 29, 1952; 1411 GCT; 8°19'N, 90°30'W; sounding, 1835 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| | 0 | 29.00 | 33.76 | 21.16 | 664 | 0 | 29.00 | 33.76 | 21.16 | 664 | 0.00 |
| | 10 | 28.99 | 33.78 | 21.17 | 662 | 10 | 28.99 | 33.78 | 21.17 | 662 | 0.07 |
| | 48 | 14.73 | 34.84 | 25.93 | 209 | 20 | 25.20 | 34.30 | 22.77 | 509 | 0.12 |
| | 96 | 13.43 | 34.84 | 26.20 | 183 | 30 | 19.10 | 34.72 | 24.80 | 316 | 0.17 |
| | 144 | 12.76 | 34.83 | 26.33 | 170 | 50 | 14.65 | 34.84 | 25.94 | 207 | 0.22 |
| | 191 | 12.09 | 34.81 | 26.44 | 159 | 75 | 13.90 | 34.84 | 26.10 | 192 | 0.27 |
| | 284 | 10.73 | 34.74 | 26.64 | 141 | 100 | 13.37 | 34.84 | 26.21 | 181 | 0.32 |
| | 376 | 9.75 | 34.69 | 26.77 | 128 | 150 | 12.69 | 34.83 | 26.34 | 169 | 0.41 |
| | 469 | 8.24 | 34.61 | 26.95 | 111 | 200 | 11.96 | 34.80 | 26.46 | 158 | 0.49 |
| | 655 | 6.50 | 34.60 | 27.19 | 88 | 250 | 11.24 | 34.77 | 26.57 | 147 | 0.57 |
| | 749 | 5.91 | 34.58 | 27.25 | 83 | 300 | 10.55 | 34.73 | 26.67 | 138 | 0.64 |
| | 843 | 5.38 | 34.57 | 27.31 | 77 | 400 | 9.35 | 34.67 | 26.82 | 123 | 0.78 |
| | 939 | 4.93 | 34.59 | 27.38 | 71 | 500 | 7.91 | 34.60 | 26.99 | 107 | 0.91 |
| | 1134 | 4.17 | 34.61 | 27.48 | 61 | 600 | 6.96 | 34.60 | 27.13 | 94 | 1.02 |
| | | | | | | 700 | 6.23 | 34.59 | 27.22 | 86 | 1.11 |
| | | | | | | 800 | 5.57 | 34.57 | 27.29 | 79 | 1.21 |
| | | | | | | 1000 | 4.69 | 34.60 | 27.42 | 67 | 1.37 |

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | g/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| USS MARYSVILLE; May 30, 1952; 0314, 0152 GCT; 9°26'N, 89°52'W; sounding, 1840 fm; wind, 240°, force 1; weather, cloudy; sea, moderate; wire angle, 00°, 05°. | | | | | | | | | | 59 |
| 0 | 28.68 | 33.89 | 21.36 | 644 | 0 | 28.68 | 33.89 | 21.36 | 644 | 0.00 |
| 10 | 24.62 | 34.36 | 22.99 | 488 | 10 | 24.62 | 34.36 | 22.99 | 488 | 0.06 |
| 25 | 16.64 | 34.76 | 25.43 | 255 | 20 | 19.50 | 34.65 | 24.64 | 330 | 0.10 |
| 50 | 14.25 | 34.83 | 26.02 | 200 | 30 | 15.60 | 34.78 | 25.69 | 231 | 0.13 |
| 74 | 13.40 | 34.88 | 26.24 | 179 | 50 | 14.25 | 34.83 | 26.02 | 200 | 0.17 |
| 98 | 12.97 | 34.90 | 26.34 | 169 | 75 | 13.39 | 34.87 | 26.23 | 180 | 0.22 |
| 147 | 12.22 | 34.83 | 26.43 | 160 | 100 | 12.94 | 34.90 | 26.35 | 169 | 0.26 |
| 195 | 11.62 | 34.78 | 26.51 | 153 | 150 | 12.20 | 34.83 | 26.44 | 160 | 0.34 |
| 292 | 10.29 | 34.70 | 26.69 | 136 | 200 | 11.55 | 34.77 | 26.51 | 153 | 0.43 |
| 389 | 8.79 | 34.63 | 26.88 | 118 | 250 | 10.89 | 34.73 | 26.60 | 144 | 0.50 |
| 487 | 7.62 | 34.57 | 27.01 | 105 | 300 | 10.18 | 34.69 | 26.70 | 135 | 0.58 |
| 585 | 6.74 | 34.56 | 27.13 | 94 | 400 | 8.65 | 34.62 | 26.90 | 117 | 0.71 |
| | | | | | 500 | 7.48 | 34.57 | 27.03 | 104 | 0.83 |
| 517a) | 7.28 | 34.55 | 27.05 | 102 | 600 | 6.62 | 34.56 | 27.15 | 93 | 0.93 |
| 618 | 6.49 | 34.56 | 27.16 | 91 | 700 | 5.88 | 34.56 | 27.24 | 84 | 1.03 |
| 774 | 5.45 | 34.56 | 27.29 | 79 | 800 | 5.34 | 34.56 | 27.31 | 77 | 1.12 |
| 826 | 5.23 | 34.56 | 27.32 | 76 | 1000 | 4.42 | 34.55 | 27.41 | 68 | 1.29 |
| 879 | 4.95 | 34.55 | 27.35 | 74 | 1200 | 3.74 | 34.57 | 27.49 | 60 | 1.43 |
| 930 | 4.77 | 34.53 | 27.35 | 73 | | | | | | |
| 982 | 4.49 | 34.55 | 27.40 | 69 | | | | | | |
| 1034 | 4.31 | 34.55 | 27.42 | 67 | | | | | | |
| 1086 | 4.11 | 34.55 | 27.44 | 65 | | | | | | |
| 1139 | 3.93 | 34.56 | 27.47 | 63 | | | | | | |
| 1244 | 3.60 | 34.57 | 27.51 | 59 | | | | | | |
| USS MARYSVILLE; May 30, 1952; 1448, 1330 GCT; 10°31'N, 89°24'W; sounding, 1900 fm; wind, 340°, force 2; weather, rain; sea, moderate; wire angle, 17°, 17°. | | | | | | | | | | 60 |
| 0 | 28.40 | 34.23 | 21.71 | 611 | 0 | 28.40 | 34.23 | 21.71 | 611 | 0.00 |
| 10 | 28.39 | 34.20 | 21.69 | 613 | 10 | 28.39 | 34.20 | 21.69 | 613 | 0.06 |
| 25 | 19.76 | 34.67 | 24.59 | 335 | 20 | 23.90 | 34.44 | 23.27 | 462 | 0.12 |
| 49 | 14.34 | 34.87 | 26.03 | 198 | 30 | 17.60 | 34.76 | 25.20 | 277 | 0.15 |
| 73 | 13.62 | 34.85 | 26.17 | 186 | 50 | 14.30 | 34.87 | 26.04 | 198 | 0.20 |
| 98 | 13.13 | 34.89 | 26.30 | 173 | 75 | 13.60 | 34.89 | 26.20 | 182 | 0.25 |
| 146 | 12.36 | 34.83 | 26.41 | 163 | 100 | 13.07 | 34.89 | 26.31 | 172 | 0.29 |
| 194 | 11.87 | 34.81 | 26.49 | 156 | 150 | 12.31 | 34.83 | 26.42 | 162 | 0.38 |
| 290 | - | 34.76 | | | 200 | 11.78 | 34.81 | 26.50 | 154 | 0.46 |
| 388 | 9.05 | 34.66 | 26.86 | 120 | 250 | 11.10 | 34.78 | 26.61 | 144 | 0.54 |
| 486 | 7.72 | 34.58 | 27.01 | 106 | 300 | 10.36 | 34.75 | 26.71 | 134 | 0.61 |
| 586 | 6.72 | 34.56 | 27.13 | 94 | 400 | 8.87 | 34.65 | 27.88 | 118 | 0.74 |
| | | | | | 500 | 7.54 | 34.55 | 27.01 | 106 | 0.86 |
| 500a) | 7.54 | 34.55 | 27.01 | 106 | 600 | 6.64 | 34.56 | 27.14 | 93 | 0.97 |
| 602 | 6.64 | 34.57 | 27.15 | 92 | 700 | 5.99 | 34.55 | 27.22 | 86 | 1.07 |
| 756 | 5.64 | 34.54 | 27.26 | 82 | 800 | 5.45 | 34.54 | 27.28 | 80 | 1.16 |
| 807 | 5.41 | 34.54 | 27.28 | 80 | 1000 | 4.54 | 34.55 | 27.39 | 69 | 1.33 |
| 860 | 5.16 | 34.56 | 27.33 | 75 | 1200 | 3.81 | 34.58 | 27.49 | 60 | 1.48 |
| 911 | 4.94 | 34.54 | 27.34 | 75 | | | | | | |
| 963 | 4.74 | 34.56 | 27.38 | 71 | | | | | | |
| 1015 | 4.46 | 34.55 | 27.40 | 69 | | | | | | |
| 1067 | 4.29 | 34.55 | 27.42 | 67 | | | | | | |
| 1119 | 4.10 | 34.58 | 27.46 | 63 | | | | | | |
| 1223 | 3.79 | 34.58 | 27.50 | 60 | | | | | | |
| 1433 | 3.17 | 34.60 | 27.57 | 52 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

USNEL SHUTTLE

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |
| 61 | USS MARYSVILLE; May 31, 1952; 0215 GCT; 9°29'N, 88°59'W; sounding, 1800 fm; wind, 120°, force 3; weather, rain; sea, moderate; wire angle, 00°. | | | | | | | | | |
| 0 | 28.36 | 33.93 | 21.49 | 631 | 0 | 28.36 | 33.93 | 21.49 | 631 | 0.00 |
| 10 | 26.62 | 34.08 | 22.17 | 567 | 10 | 26.62 | 34.08 | 22.17 | 567 | 0.06 |
| 50 | 14.56 | 34.79 | 25.92 | 209 | 20 | 22.80 | 34.23 | 23.43 | 446 | 0.11 |
| 98 | 12.33 | 34.76 | 26.36 | 168 | 30 | 18.65 | 34.62 | 24.84 | 312 | 0.15 |
| 147 | 11.86 | 34.81 | 26.49 | 155 | 50 | 14.56 | 34.79 | 25.92 | 209 | 0.20 |
| 196 | 11.34 | 34.81 | 26.58 | 146 | 75 | 12.76 | 34.77 | 26.28 | 175 | 0.25 |
| 292 | 10.45 | 34.73 | 26.68 | 137 | 100 | 12.32 | 34.76 | 26.36 | 167 | 0.29 |
| 388 | 9.14 | 34.65 | 26.84 | 122 | 150 | 11.82 | 34.81 | 26.49 | 155 | 0.37 |
| 484 | 7.82 | 34.61 | 27.01 | 105 | 200 | 11.31 | 34.81 | 26.59 | 146 | 0.45 |
| 676 | 6.21 | 34.56 | 27.20 | 88 | 250 | 10.86 | 34.77 | 26.64 | 141 | 0.53 |
| 772 | 5.60 | 34.55 | 27.27 | 81 | 300 | 10.35 | 34.72 | 26.69 | 136 | 0.60 |
| 870 | 5.09 | 34.56 | 27.34 | 75 | 400 | 8.97 | 34.65 | 26.87 | 119 | 0.73 |
| 968 | 4.65 | 34.55 | 27.38 | 71 | 500 | 7.65 | 34.60 | 27.03 | 104 | 0.85 |
| 1166 | 3.91 | 34.58 | 27.48 | 61 | 600 | 6.74 | 34.57 | 27.14 | 94 | 0.96 |
| | | | | | 700 | 6.06 | 34.56 | 27.22 | 86 | 1.06 |
| | | | | | 800 | 5.47 | 34.56 | 27.29 | 79 | 1.15 |
| | | | | | 1000 | 4.52 | 34.56 | 27.40 | 69 | 1.32 |
| 62 | USS MARYSVILLE; May 31, 1952; 1520, 1546, 1405 GCT; 8°32'N, 88°25'W; sounding, 1825 fm; wind, 250°, force 2; weather, cloudy; sea, moderate; wire angle, 40°, 50°, 42°. | | | | | | | | | |
| 0 | 28.58 | 33.73 | 21.27 | 653 | 0 | 28.58 | 33.73 | 21.27 | 653 | 0.00 |
| 9 | 28.57 | 33.73 | 21.28 | 652 | 10 | 28.40 | 33.73 | 21.33 | 647 | 0.07 |
| 24 | 22.75 | 34.48 | 23.63 | 427 | 20 | 24.20 | 34.15 | 22.96 | 491 | 0.12 |
| 45 | 16.17 | 34.79 | 25.57 | 243 | 30 | 18.75 | 34.60 | 24.80 | 316 | 0.16 |
| 73 | 13.60 | 34.84 | 26.17 | 186 | 50 | 15.52 | 34.80 | 25.72 | 228 | 0.22 |
| 97 | 13.02 | 34.88 | 26.31 | 172 | 75 | 13.50 | 34.84 | 26.19 | 184 | 0.27 |
| 146 | 12.24 | 34.83 | 26.43 | 161 | 100 | 13.00 | 34.88 | 26.32 | 171 | 0.31 |
| | | | | | 150 | 12.20 | 34.83 | 26.44 | 160 | 0.40 |
| 169 | 11.84 | 34.79 | 26.48 | 156 | 200 | 11.51 | 34.74 | 26.50 | 154 | 0.48 |
| 257 | 10.89 | 34.70 | 26.58 | 146 | 250 | 10.97 | 34.70 | 26.57 | 148 | 0.56 |
| 352 | 9.86 | 34.69 | 26.75 | 130 | 300 | 10.47 | 34.70 | 26.66 | 139 | 0.63 |
| 457 | 8.24 | 34.62 | 26.96 | 110 | 400 | 9.22 | 34.66 | 26.84 | 122 | 0.77 |
| 571 | 7.14 | 34.57 | 27.08 | 99 | 500 | 7.82 | 34.59 | 27.00 | 107 | 0.89 |
| | | | | | 600 | 6.97 | 34.56 | 27.10 | 97 | 1.00 |
| 461a) | 8.20 | 34.60 | 26.95 | 111 | 700 | 6.28 | 34.54 | 27.17 | 90 | 1.11 |
| 561 | 7.26 | 34.57 | 27.06 | 101 | 800 | 5.68 | 34.55 | 27.26 | 82 | 1.20 |
| 719 | 6.17 | 34.54 | 27.19 | 89 | 1000 | 4.62 | 34.57 | 27.40 | 69 | 1.38 |
| 785 | 5.83 | 34.57 | 27.26 | 82 | 1200 | 3.93 | 34.60 | 27.50 | 60 | 1.52 |
| 826 | 5.47 | 34.54 | 27.28 | 80 | | | | | | |
| 881 | 5.17 | 34.56 | 27.33 | 76 | | | | | | |
| 935 | 4.86 | 34.56 | 27.36 | 72 | | | | | | |
| 991 | 4.64 | 34.57 | 27.40 | 69 | | | | | | |
| 1047 | 4.40 | 34.58 | 27.43 | 66 | | | | | | |
| 1104 | 4.26 | 34.59 | 27.45 | 64 | | | | | | |
| 1221 | 3.86 | 34.60 | 27.50 | 59 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| USS MARYSVILLE; June 1, 1952; 0717, 0602 GCT; 8°33'N, 87°07'W; sounding, 1740 fm; wind, 240°, force 2; weather, partly cloudy; sea, rough; wire angle, 35°, 45°. | | | | | | | | | | 63 |
| 0 | 28.59 | 33.60 | 21.17 | 662 | 0 | 28.59 | 33.60 | 21.17 | 662 | 0.00 |
| 10 | 28.57 | 33.60 | 21.18 | 662 | 10 | 28.57 | 33.60 | 21.18 | 662 | 0.07 |
| 26 | 24.98 | 34.19 | 22.76 | 511 | 20 | 27.85 | 33.61 | 21.42 | 639 | 0.13 |
| 52 | 16.81 | 34.82 | 25.44 | 255 | 30 | 24.15 | 34.35 | 23.13 | 475 | 0.19 |
| 76 | 14.84 | 34.75 | 25.83 | 217 | 50 | 17.30 | 34.82 | 25.32 | 266 | 0.26 |
| 100 | 13.79 | 34.79 | 26.09 | 193 | 75 | 14.85 | 34.75 | 25.83 | 218 | 0.32 |
| 148 | 13.20 | 34.90 | 26.29 | 174 | 100 | 13.79 | 34.79 | 26.09 | 193 | 0.37 |
| 194 | 12.61 | 34.87 | 26.39 | 165 | 150 | 13.18 | 34.90 | 26.30 | 173 | 0.47 |
| 290 | 11.32 | 34.77 | 26.56 | 149 | 200 | 12.57 | 34.86 | 26.39 | 165 | 0.55 |
| 394 | 9.59 | 34.69 | 26.80 | 126 | 250 | 11.89 | 34.82 | 26.49 | 155 | 0.64 |
| 505 | 7.74 | 34.63 | 27.04 | 103 | 300 | 11.17 | 34.76 | 26.58 | 147 | 0.72 |
| 625 | 6.63 | 34.60 | 27.18 | 90 | 400 | 9.46 | 34.68 | 26.81 | 124 | 0.86 |
| | | | | | 500 | 7.82 | 34.62 | 27.02 | 105 | 0.98 |
| 438a) | 8.64 | 34.63 | 26.91 | 116 | 600 | 6.87 | 34.60 | 27.14 | 93 | 1.09 |
| 531 | 7.49 | 34.60 | 27.06 | 101 | 700 | 6.02 | 34.55 | 27.22 | 86 | 1.19 |
| 680 | 6.16 | 34.55 | 27.20 | 88 | 800 | 5.42 | 34.55 | 27.29 | 79 | 1.28 |
| 732 | 5.78 | 34.54 | 27.24 | 84 | 1000 | 4.47 | 34.56 | 27.41 | 68 | 1.45 |
| 784 | 5.47 | 34.56 | 27.29 | 79 | | | | | | |
| 837 | 5.26 | 34.54 | 27.30 | 78 | | | | | | |
| 890 | 4.97 | 34.56 | 27.35 | 73 | | | | | | |
| 944 | 4.64 | 34.56 | 27.39 | 70 | | | | | | |
| 999 | 4.47 | 34.56 | 27.41 | 68 | | | | | | |
| 1055 | 4.26 | 34.56 | 27.43 | 66 | | | | | | |
| 1167 | 3.86 | 34.58 | 27.49 | 60 | | | | | | |
| USS MARYSVILLE; June 2, 1952; 0713, 0559 GCT; 10°20'N, 87°26'W; sounding, 1550 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 13°, 00°. | | | | | | | | | | 64 |
| 0 | 29.34 | 33.85 | 21.11 | 668 | 0 | 29.34 | 33.85 | 21.11 | 668 | 0.00 |
| 10 | 29.15 | 34.03 | 21.31 | 649 | 10 | 29.15 | 34.03 | 21.31 | 649 | 0.07 |
| 25 | 23.87 | 34.30 | 23.17 | 471 | 20 | 25.30 | 34.20 | 22.67 | 519 | 0.12 |
| 48 | 18.78 | 34.72 | 24.88 | 308 | 30 | 23.20 | 34.44 | 23.47 | 442 | 0.17 |
| 72 | 15.65 | 34.78 | 25.68 | 232 | 50 | 18.15 | 34.72 | 25.04 | 293 | 0.25 |
| 95 | 14.28 | 34.86 | 26.04 | 198 | 75 | 15.45 | 34.78 | 25.72 | 228 | 0.31 |
| 142 | 12.85 | 34.82 | 26.30 | 173 | 100 | 13.73 | 34.86 | 26.15 | 187 | 0.36 |
| 188 | 12.33 | 34.83 | 26.41 | 162 | 150 | 12.75 | 34.82 | 26.32 | 171 | 0.46 |
| 281 | 11.20 | 34.77 | 26.58 | 147 | 200 | 12.17 | 34.83 | 26.44 | 159 | 0.54 |
| 374 | 9.63 | 34.68 | 26.78 | 127 | 250 | 11.58 | 34.79 | 26.52 | 152 | 0.62 |
| 469 | 8.21 | 34.61 | 26.96 | 111 | 300 | 10.93 | 34.75 | 26.61 | 143 | 0.70 |
| 566 | 7.11 | 34.60 | 27.11 | 96 | 400 | 9.20 | 34.66 | 26.84 | 122 | 0.84 |
| | | | | | 500 | 7.79 | 34.60 | 27.01 | 106 | 0.96 |
| 485a) | 7.99 | 34.59 | 26.97 | 109 | 600 | 6.86 | 34.59 | 27.14 | 94 | 1.07 |
| 582 | 6.99 | 34.59 | 27.12 | 95 | 700 | 6.12 | 34.57 | 27.22 | 86 | 1.17 |
| 728 | 5.94 | 34.57 | 27.24 | 84 | 800 | 5.57 | 34.56 | 27.28 | 80 | 1.26 |
| 777 | 5.63 | 34.56 | 27.27 | 81 | 1000 | 4.55 | 34.57 | 27.41 | 68 | 1.43 |
| 827 | 5.47 | 34.56 | 27.29 | 79 | 1200 | 3.78 | 34.59 | 27.50 | 59 | 1.58 |
| 876 | 5.19 | 34.55 | 27.32 | 77 | | | | | | |
| 925 | 4.95 | 34.56 | 27.35 | 73 | | | | | | |
| 974 | 4.67 | 34.57 | 27.39 | 69 | | | | | | |
| 1024 | 4.42 | 34.57 | 27.42 | 67 | | | | | | |
| 1073 | 4.20 | 34.57 | 27.45 | 64 | | | | | | |
| 1171 | 3.86 | 34.59 | 27.50 | 60 | | | | | | |
| 1368 | 3.29 | 34.60 | 27.56 | 54 | | | | | | |

a) Overlapping casts; reconciliation of property curves when necessary.

USNEL SHUTTLE

| OBSERVED | | | COMPUTED | | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\Delta D$ dyn m |

65 USS MARYSVILLE; June 3, 1952; 1453, 1339 GCT; 11°51'N, 88°28'W; sounding, 1730 fm; wind, calm; weather, cloudy; sea, smooth; wire angle, 05°, 10°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.91 | 33.62 | 21.08 | 671 | 0 | 28.91 | 33.62 | 21.08 | 671 | 0.00 |
| 10 | 28.55 | 33.62 | 21.20 | 660 | 10 | 28.55 | 33.62 | 21.20 | 660 | 0.07 |
| 26 | 21.63 | 34.54 | 23.99 | 393 | 20 | 24.30 | 34.30 | 23.04 | 483 | 0.12 |
| 51 | 16.97 | 34.77 | 25.36 | 262 | 30 | 20.10 | 34.58 | 24.43 | 350 | 0.17 |
| 77 | 14.97 | 34.90 | 25.92 | 209 | 50 | 16.99 | 34.76 | 25.35 | 263 | 0.23 |
| 102 | 14.34 | 34.91 | 26.06 | 196 | 75 | 15.05 | 34.90 | 25.90 | 211 | 0.29 |
| 152 | 13.49 | 34.92 | 26.25 | 178 | 100 | 14.37 | 34.91 | 26.06 | 196 | 0.34 |
| 202 | 12.84 | 34.88 | 26.35 | 168 | 150 | 13.52 | 34.92 | 26.24 | 178 | 0.43 |
| 300 | 11.54 | 34.79 | 26.53 | 151 | 200 | 12.88 | 34.88 | 26.34 | 169 | 0.52 |
| 401 | 10.00 | 34.71 | 26.75 | 131 | 250 | 12.25 | 34.84 | 26.44 | 160 | 0.61 |
| 502 | 8.19 | 34.64 | 26.98 | 108 | 300 | 11.54 | 34.79 | 26.53 | 151 | 0.69 |
| 604 | 7.07 | 34.58 | 27.10 | 97 | 400 | 10.01 | 34.71 | 26.74 | 131 | 0.84 |
| | | | | | 500 | 8.23 | 34.63 | 26.97 | 110 | 0.97 |
| 498a) | 8.27 | 34.62 | 26.96 | 111 | 600 | 7.08 | 34.58 | 27.10 | 97 | 1.08 |
| 599 | 7.09 | 34.58 | 27.10 | 98 | 700 | 6.35 | 34.55 | 27.17 | 90 | 1.18 |
| 750 | 6.00 | 34.54 | 27.21 | 87 | 800 | 5.68 | 34.54 | 27.25 | 83 | 1.28 |
| 801 | 5.67 | 34.54 | 27.25 | 83 | 1000 | 4.63 | 34.57 | 27.40 | 69 | 1.45 |
| 852 | 5.45 | 34.56 | 27.29 | 79 | 1200 | 3.86 | 34.59 | 27.50 | 60 | 1.60 |
| 901 | 5.15 | 34.56 | 27.33 | 75 | | | | | | |
| 952 | 4.84 | 34.55 | 27.36 | 73 | | | | | | |
| 1003 | 4.60 | 34.57 | 27.40 | 69 | | | | | | |
| 1054 | 4.40 | 34.56 | 27.42 | 67 | | | | | | |
| 1104 | 4.17 | 34.58 | 27.46 | 63 | | | | | | |
| 1207 | 3.83 | 34.60 | 27.51 | 59 | | | | | | |
| 1411 | 3.20b) | 34.60 | 27.57 | 53 | | | | | | |

66 USS MARYSVILLE; June 3, 1952; 1920 GCT; 12°18'N, 88°19'W; sounding, 475 fm; wind, calm; weather, cloudy; sea, slight; wire angle, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.52 | 33.48 | 20.77 | 701 | 0 | 29.52 | 33.48 | 20.77 | 701 | 0.00 |
| 10 | 28.81 | 33.85 | 21.29 | 651 | 10 | 28.81 | 33.85 | 21.29 | 651 | 0.07 |
| 24 | 27.18 | 33.91 | 21.86 | 596 | 20 | 27.90 | 33.89 | 21.61 | 620 | 0.13 |
| 49 | 17.61 | 34.73 | 25.18 | 280 | 30 | 24.70 | 34.10 | 22.77 | 509 | 0.19 |
| 72 | 15.40 | 34.88 | 25.81 | 220 | 50 | 17.45 | 34.75 | 25.23 | 274 | 0.27 |
| 96 | 14.55 | 34.89 | 26.00 | 201 | 75 | 15.25 | 34.88 | 25.84 | 217 | 0.33 |
| 144 | 13.93 | 34.89 | 26.14 | 189 | 100 | 14.52 | 34.89 | 26.01 | 201 | 0.38 |
| 191 | 13.47 | 34.88 | 26.22 | 180 | 150 | 13.88 | 34.89 | 26.15 | 188 | 0.48 |
| 240 | 12.86 | 34.85 | 26.32 | 171 | 200 | 13.37 | 34.88 | 26.24 | 178 | 0.57 |
| 288 | 12.17 | 34.81 | 26.43 | 161 | 250 | 12.73 | 34.84 | 26.34 | 169 | 0.66 |
| 386 | 10.42 | 34.70 | 26.66 | 138 | 300 | 11.98 | 34.80 | 26.46 | 158 | 0.75 |
| 483 | 8.10 | 34.62 | 26.98 | 108 | 400 | 10.03 | 34.68 | 26.72 | 134 | 0.90 |
| 580 | 7.03 | 34.58 | 27.10 | 97 | 500 | 7.89 | 34.61 | 27.00 | 106 | 1.03 |
| 678 | 6.25 | 34.57 | 27.20 | 88 | 600 | 6.85 | 34.59 | 27.14 | 94 | 1.14 |

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 3.31°C, not used in interpolation.

UW

BB-1

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ $10^{-5}$ cm$^3$/g | $\Delta D$ dyn. m | |
| BROWN BEAR; March 14, 1952; 1930 GCT;[a] 48°26'N, 124°52'W; sounding, 155 fm; wind, 140°, 16 kt; wire angle, 30°, 54°. | | | | | | | | | | | 8 |
| 0 | 7.93 | 31.33 | 6.48 | 0 | 7.93 | 31.33 | 6.48 | 24.43 | 351 | 0.00 | |
| 4 | 7.93 | 31.35 | 5.19 | 10 | 7.74 | 31.40 | 5.60 | 24.51 | 343 | 0.04 | |
| 8 | 7.82 | 31.39 | 5.73 | 20 | 7.59 | 31.48 | 5.23 | 24.59 | 336 | 0.07 | |
| 16 | 7.58 | 31.45 | 5.31 | 30 | 7.70 | 31.63 | 5.54 | 24.70 | 326 | 0.10 | |
| 25 | 7.62 | 31.54 | 5.22 | 50 | 7.91 | 31.91 | 5.26 | 24.89 | 308 | 0.16 | |
| 41 | 7.83 | 31.82 | 5.82 | 75 | 7.94 | 32.43 | 4.08 | 25.29 | 270 | 0.24 | |
| 63 | 7.97 | 32.11 | 4.59 | 100 | 7.87 | 32.64 | 4.20 | 25.46 | 254 | 0.30 | |
| 82 | 7.92 | 32.56 | 3.91 | 150 | 7.77 | 33.33 | 3.35 | 26.02 | 202 | 0.42 | |
| 111 | 7.84 | 32.73 | 4.22 | | | | | | | | |
| 148 | 7.81 | 33.31 | 3.49 | | | | | | | | |
| 159 | 7.70 | 33.53 | 2.86 | | | | | | | | |
| BROWN BEAR; March 15, 1952; 0445 GCT; 47°53'N, 126°17'W; sounding, 1000 fm; wind, 040°, 18 kt; wire angle, 15°, 18°. | | | | | | | | | | | 9 |
| 0 | 7.43 | 32.52 | 6.28 | 0 | 7.43 | 32.52 | 6.28 | 25.43 | 256 | 0.00 | |
| 10 | 7.46 | 32.52 | 6.51 | 10 | 7.46 | 32.52 | 6.51 | 25.43 | 256 | 0.03 | |
| 20 | 7.44 | 32.53 | 6.41 | 20 | 7.44 | 32.53 | 6.41 | 25.44 | 255 | 0.05 | |
| 30 | 7.44 | 32.52 | 6.35 | 30 | 7.44 | 32.52 | 6.35 | 25.43 | 256 | 0.08 | |
| 50 | 7.39 | 32.53 | 6.50 | 50 | 7.39 | 32.53 | 6.50 | 25.44 | 255 | 0.13 | |
| 75 | 7.40 | 32.54 | 6.44 | 75 | 7.40 | 32.54 | 6.44 | 25.45 | 255 | 0.19 | |
| 100 | 7.47 | 33.23 | 4.29 | 100 | 7.47 | 33.23 | 4.29 | 25.98 | 205 | 0.25 | |
| 150 | 7.13 | 33.73 | 3.39 | 150 | 7.13 | 33.73 | 3.39 | 26.42 | 164 | 0.34 | |
| | | | | 200 | 6.60 | 33.86 | 3.17 | 26.60 | 148 | 0.42 | |
| 197 | 6.64 | 33.86 | 3.20 | 250 | 6.06 | 33.86 | 2.65 | 26.67 | 142 | 0.49 | |
| 296 | 5.69 | 33.89 | 2.16 | 300 | 5.67 | 33.90 | 2.11 | 26.75 | 134 | 0.56 | |
| 394 | 5.30 | 34.03 | 1.08 | 400 | 5.28 | 34.04 | 1.06 | 26.90 | 120 | 0.69 | |
| 591 | 4.62 | 34.21 | 0.76 | 500 | 4.91 | 34.15 | 0.93 | 27.03 | 109 | 0.80 | |
| 791 | 4.13 | 34.21 | 0.28 | 600 | 4.60 | 34.21 | 0.73 | 27.12 | 102 | 0.91 | |
| 985 | 3.47 | 34.38 | 0.29 | 700 | 4.38 | 34.19 | 0.44 | 27.12 | 102 | 1.01 | |
| 1372 | 2.77 | 34.47 | 0.58 | 800 | 4.09 | 34.22 | 0.28 | 27.18 | 97 | 1.11 | |
| 1777 | 2.15 | 34.53 | 0.96 | 1000 | 3.44 | 34.38 | 0.30 | 27.37 | 79 | 1.28 | |
| | | | | 1200 | 3.07 | 34.43 | 0.45 | 27.45 | 72 | 1.44 | |
| | | | | 1500 | 2.56 | 34.49 | 0.69 | 27.54 | 64 | 1.64 | |
| BROWN BEAR; March 15, 1952; 1238 GCT; 48°17'N, 125°20'W; sounding, 78 fm; wind, 040°, 15 kt; wire angle, 10°, 08°. | | | | | | | | | | | 10 |
| 0b) | 7.99 | 32.52 | 6.17 | 0 | 7.99 | 32.52 | 6.17 | 25.35 | 263 | 0.00 | |
| 10 | 7.98 | 32.53 | 4.75 | 10 | 7.98 | 32.53 | 4.75 | 25.36 | 262 | 0.03 | |
| | | | | 20 | 7.98 | 32.54 | 4.92 | 25.37 | 262 | 0.05 | |
| 20c) | 7.98 | 32.54 | 4.92 | 30 | 8.07 | 32.54 | 6.01 | 25.36 | 263 | 0.08 | |
| | | | | 50 | 7.95 | 32.54 | 5.50 | 25.37 | 262 | 0.13 | |
| 30b) | 8.07 | 32.54 | 6.01 | 75 | 7.94 | 32.59 | 4.77 | 25.41 | 258 | 0.20 | |
| 50 | 7.95 | 32.54 | 5.50 | 100 | | 33.14 | 3.12 | | | | |
| 75 | 7.94 | 32.59 | 4.77 | | | | | | | | |
| 100 | - | 33.14 | 3.12 | | | | | | | | |
| 125 | 7.76 | 33.47 | 3.12 | | | | | | | | |

a) Times reported are those of the messenger release of the first cast.
b) First cast.
c) Second cast.

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm$^3$/g | dyn. m |

48

BROWN BEAR; April 29, 1952; 0850 GCT;[a] 48°27'N, 124°50'W; sounding, 157 fm; wind, 140°, 10 kt; weather, clear; wire angle, 36°, 17°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0b) | 8.19 | 32.00 | 4.49 | 0 | 8.19 | 32.00 | 4.49 | 24.92 | 305 | 0.00 |
| 5 | 8.20 | 32.01 | 6.25 | 10 | 8.11 | 32.13 | 5.66 | 25.03 | 294 | 0.03 |
| 10 | 8.11 | 32.13 | 5.66 | 20 | 8.05 | 32.20 | 5.47 | 25.09 | 288 | 0.06 |
| 19 | 8.04 | 32.20 | 5.50 | 30 | 7.96 | 32.30 | 5.02 | 25.18 | 280 | 0.09 |
| 28 | 8.03 | 32.23 | 5.17 | 50 | 7.61 | 32.85 | 4.24 | 25.66 | 234 | 0.14 |
| 47 | 7.57 | 32.81 | 4.16 | 75 | 7.59 | 33.19 | 4.18 | 25.93 | 209 | 0.19 |
| 71 | 7.66 | 33.12 | 4.37 | 100 | 7.17 | 33.53 | 3.24 | 26.26 | 178 | 0.24 |
| 96 | 7.24 | 33.50 | 3.33 | 150 | 6.69 | | 2.46 | | | |
| | | | | 200 | 6.59 | | 2.16 | | | |
| 140c) | 6.88 | - | - | | | | | | | |
| 143b) | 6.69 | 33.76 | 2.52 | | | | | | | |
| 183c) | 6.64 | 33.82 | 2.25 | | | | | | | |
| 209 | 6.55 | - | 2.13 | | | | | | | |

49

BROWN BEAR; April 29, 1952; 1627 GCT; 48°52'N, 126°00'W; sounding, missing; wind, 090°, 21 kt; weather, clear; wire angle, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.56 | 31.97 | 7.31 | 0 | 8.56 | 31.97 | 7.31 | 24.84 | 312 | 0.00 |
| 5 | 8.55 | 31.97 | 6.51 | 10 | 8.53 | 31.97 | 6.47 | 24.84 | 312 | 0.03 |
| 10 | 8.53 | 31.97 | 6.47 | 20 | 8.46 | 31.97 | 7.21 | 24.85 | 311 | 0.06 |
| 20 | 8.46 | 31.97 | 7.21 | 30 | 7.85 | 32.26 | 6.80 | 25.17 | 281 | 0.09 |
| 30 | 7.85 | 32.26 | 6.80 | 50 | 7.54 | 32.50 | 6.28 | 25.40 | 259 | 0.15 |
| 40 | 7.60 | 32.37 | 6.75 | | | | | | | |
| 60 | 7.67 | 32.64 | 5.40 | | | | | | | |

50

BROWN BEAR; May 2, 1952; 0758 GCT; 48°32'N, 126°08'W; sounding, 105 fm; wind, 220°, 3 kt; weather, moderate to heavy rain showers; wire angle, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.06 | 32.38 | 6.89 | 0 | 8.06 | 32.38 | 6.89 | 25.23 | 275 | 0.00 |
| 5 | 8.08 | 32.41 | 6.83 | 10 | 8.06 | 32.41 | 6.83 | 25.26 | 272 | 0.03 |
| 10 | 8.06 | 32.41 | 6.83 | 20 | 7.90 | 32.43 | 6.74 | 25.29 | 269 | 0.05 |
| 20 | 7.90 | 32.43 | 6.74 | 30 | 7.88 | 32.44 | 6.74 | 25.31 | 268 | 0.08 |
| 30 | 7.88 | 32.44 | 6.74 | 50 | 7.92 | 32.42 | 6.74 | 25.28 | 270 | 0.14 |
| 50 | 7.92 | 32.42 | 6.74 | 75 | 7.91 | 32.42 | 6.66 | 25.29 | 271 | 0.20 |
| 75 | 7.91 | 32.42 | 6.66 | 100 | 7.67 | 32.45 | 6.54 | 25.34 | 266 | 0.27 |
| 100 | 7.67 | 32.45 | 6.54 | 150 | 7.29 | 32.77 | 3.29 | 25.65 | 237 | 0.40 |
| 140 | 7.41 | 32.62 | 3.66 | | | | | | | |
| 180 | 6.83 | 33.47 | 3.00 | | | | | | | |

51

BROWN BEAR; May 2, 1952; 1235 GCT; 48°17'N, 126°34'W; sounding, 1175 fm; wind, 220°, 6 kt; weather, partly cloudy; wire angle, 00°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.12 | 32.53 | 6.46 | 0 | 8.12 | 32.53 | 6.46 | 25.34 | 264 | 0.00 |
| 5 | 8.11 | 32.55 | 6.51 | 10 | 8.08 | 32.55 | 6.56 | 25.36 | 262 | 0.03 |
| 10 | 8.08 | 32.55 | 6.56 | 20 | 7.97 | 32.61 | 6.51 | 25.43 | 256 | 0.05 |
| 20 | 7.97 | 32.61 | 6.51 | 30 | 7.94 | 32.54 | 6.52 | 25.37 | 262 | 0.08 |
| 30 | 7.94 | 32.54 | 6.52 | 50 | 7.96 | 32.57 | 5.96 | 25.40 | 260 | 0.13 |
| 50 | 7.96 | 32.57 | 5.96 | 75 | 7.77 | 32.66 | 5.67 | 25.49 | 251 | 0.19 |
| 595 | 4.50 | 34.05 | 1.14 | 100 | 7.58 | 32.74 | 5.39 | 25.58 | 243 | 0.26 |
| 1705 | 2.30 | 34.56 | 0.91 | 150 | 7.21 | 32.90 | 4.84 | 25.76 | 226 | 0.37 |
| | | | | 200 | 6.85 | 33.06 | 4.32 | 25.93 | 210 | 0.48 |
| | | | | 250 | 6.51 | 33.21 | 3.83 | 26.10 | 196 | 0.58 |
| | | | | 300 | 6.18 | 33.35 | 3.36 | 26.25 | 182 | 0.68 |
| | | | | 400 | 5.56 | 33.61 | 2.51 | 26.53 | 156 | 0.85 |
| | | | | 500 | 4.99 | 33.85 | 1.76 | 26.79 | 132 | 0.99 |
| | | | | 600 | 4.48 | 34.06 | 1.11 | 27.01 | 111 | 1.11 |
| | | | | 700 | 4.01 | 34.24 | 0.57 | 27.20 | 94 | 1.22 |
| | | | | 800 | 3.60 | 34.40 | 0.13 | 27.37 | 78 | 1.30 |
| | | | | 1000 | 2.94 | 34.63 | 0.44 | 27.62 | 55 | 1.44 |
| | | | | 1200 | 2.49 | 34.74 | 0.58 | 27.74 | 43 | 1.53 |
| | | | | 1500 | 2.22 | 34.72 | 0.01 | 27.75 | 43 | 1.66 |

a) Times reported are those of the messenger release of the first cast.
b) Second cast.
c) First cast.

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ $10^{-5}$ $cm^3/g$ | ΔD dyn. m |
| 52 | BROWN BEAR; May 2, 1952; 1958 GCT; 47°50'N, 127°29'W; sounding, 1449 fm; wind, 040°, 5 kt; weather, overcast; wire angle, 06°, 00°. | | | | | | | | | |
| 0 | 8.79 | - | 6.51 | 0 | 8.79 | | 6.51 | | | |
| 5 | 8.35 | - | 5.75 | 10 | 8.36 | | 6.43 | | | |
| 10 | 8.36 | - | 6.43 | 20 | 8.24 | | 5.87 | | | |
| 20 | 8.24 | - | 5.87 | 30 | 8.21 | | 6.43 | | | |
| 30 | 8.21 | - | 6.43 | 50 | 8.24 | | 6.52 | | | |
| 50 | 8.24 | - | 6.52 | 75 | 7.66 | | 5.44 | | | |
| 100 | 7.18 | - | 4.56 | 100 | 7.18 | | 4.56 | | | |
| 200 | 6.36 | - | 2.96 | 150 | 6.78 | | 3.70 | | | |
| | | | | 200 | 6.36 | | 2.96 | | | |
| 300a) | 5.46 | 33.94 | 1.87 | 250 | 5.82 | | 2.41 | | | |
| 400 | 5.32 | - | 0.81 | 300 | 5.46 | 33.94 | 1.87 | 26.80 | 129 | |
| 600 | 4.31 | 34.18 | 0.46 | 400 | 5.32 | | 0.81 | | | |
| 799 | 3.59 | 34.43 | 0.25 | 500 | 4.78 | 34.08 | 0.62 | 26.99 | 112 | |
| 998 | 3.25 | 34.36 | 0.22 | 600 | 4.31 | 34.18 | 0.46 | 27.12 | 101 | |
| 1496 | 2.54 | - | - | 700 | 3.90 | 34.35 | 0.32 | 27.30 | 84 | |
| 1993 | 1.94 | 34.58 | 1.34 | 800 | 3.59 | 34.43 | 0.25 | 27.40 | 76 | |
| | | | | 1000 | 3.25 | 34.36 | 0.22 | 27.37 | 78 | |
| | | | | 1200 | 2.95 | 34.33 | 0.28 | 27.38 | 78 | |
| | | | | 1500 | 2.53 | 34.35 | 0.54 | 27.43 | 74 | |
| 53 | BROWN BEAR; May 3, 1952; 0636 GCT; 47°23'N, 126°10'W; sounding, 1000 fm; wind, 270°, 10 kt; weather, cloudy; wire angle, 10°, missing. | | | | | | | | | |
| 0 | 8.26 | 32.54 | 6.56 | 0 | 8.26 | 32.54 | 6.56 | 25.33 | 266 | 0.00 |
| 5 | 8.22 | 32.56 | 6.73 | 10 | 8.21 | 32.56 | 6.66 | 25.35 | 263 | 0.03 |
| 10 | 8.21 | 32.56 | 6.66 | 20 | 8.20 | 32.57 | 6.78 | 25.36 | 263 | 0.05 |
| 20 | 8.20 | 32.57 | 6.78 | 30 | 8.23 | 32.57 | 6.90 | 25.36 | 263 | 0.08 |
| 30 | 8.23 | 32.57 | 6.90 | 50 | 8.24 | 32.55 | 6.62 | 25.34 | 265 | 0.13 |
| 50 | 8.24 | 32.55 | 6.62 | 75 | 7.61 | 32.70 | 6.32 | 25.55 | 246 | 0.20 |
| 100 | 7.13 | 32.87 | 5.91 | 100 | 7.13 | 32.87 | 5.91 | 25.75 | 227 | 0.25 |
| 200 | 6.60 | 33.84 | 3.32 | 150 | 6.89 | 33.46 | 4.47 | 26.24 | 181 | 0.36 |
| | | | | 200 | 6.60 | 33.84 | 3.32 | 26.58 | 149 | 0.44 |
| 300a) | 5.85 | 33.95 | 1.85 | 250 | 6.20 | 33.90 | 2.51 | 26.68 | 140 | 0.51 |
| 400 | 5.30 | 34.05 | 0.99 | 300 | 5.85 | 33.95 | 1.85 | 26.76 | 133 | 0.58 |
| 600 | 4.55 | 34.17 | 0.41 | 400 | 5.30 | 34.05 | 0.99 | 26.91 | 120 | 0.70 |
| 800 | 3.90 | 34.29 | 0.30 | 500 | 4.91 | 34.11 | 0.64 | 27.00 | 112 | 0.82 |
| 1000 | 3.51 | 34.39 | 0.34 | 600 | 4.55 | 34.17 | 0.41 | 27.09 | 104 | 0.93 |
| 1500 | 2.54 | 34.52 | 0.91 | 700 | 4.19 | 34.23 | 0.34 | 27.18 | 96 | 1.03 |
| | | | | 800 | 3.90 | 34.29 | 0.30 | 27.25 | 90 | 1.12 |
| | | | | 1000 | 3.51 | 34.39 | 0.34 | 27.37 | 79 | 1.29 |
| | | | | 1200 | 3.12 | 34.46 | 0.48 | 27.47 | 71 | 1.44 |
| | | | | 1500 | 2.54 | 34.52 | 0.91 | 27.56 | 62 | 1.64 |
| 54 | BROWN BEAR; May 3, 1952; 1129 GCT; 47°17'N, 125°34'W; sounding, 800 fm; wind, 270°, 20 kt; weather, cloudy; wire angle, 42°, 10°. | | | | | | | | | |
| 0 | 8.50 | 32.26 | 6.78 | 0 | 8.50 | 32.26 | 6.78 | 25.07 | 290 | 0.00 |
| 5 | 8.56 | 32.27 | 6.64 | 10 | 8.50 | 32.25 | 6.52 | 25.07 | 291 | 0.03 |
| 10 | 8.50 | 32.25 | 6.52 | 20 | 8.47 | 32.27 | 6.85 | 25.09 | 289 | 0.06 |
| 20 | 8.47 | 32.27 | 6.85 | 30 | 8.42 | 32.28 | 6.68 | 25.10 | 288 | 0.09 |
| 30 | 8.42 | 32.28 | 6.68 | 50 | 8.49 | 32.31 | 6.68 | 25.11 | 287 | 0.14 |
| 49 | 8.50 | 32.29 | 6.74 | 75 | 8.14 | 32.87 | 5.16 | 25.60 | 240 | 0.21 |
| 98 | 7.85 | 33.28 | 4.07 | 100 | 7.83 | 33.30 | 4.02 | 25.99 | 204 | 0.27 |
| 197 | 6.93 | 33.94 | 2.45 | 150 | 7.34 | 33.69 | 3.10 | 26.36 | 170 | 0.36 |
| | | | | 200 | 6.91 | 33.94 | 2.44 | 26.62 | 146 | 0.44 |
| 330 | 6.04 | 34.02 | 1.81 | 250 | 6.56 | 33.97 | 2.22 | 26.69 | 140 | 0.51 |
| 495 | 5.16 | 34.11 | 0.75 | 300 | 6.23 | 34.00 | 1.97 | 26.76 | 134 | 0.58 |
| 826 | 4.55 | 34.34 | 0.22 | 400 | 5.62 | 34.06 | 1.30 | 26.88 | 123 | 0.70 |
| | | | | 500 | 5.14 | 34.11 | 0.73 | 26.98 | 115 | 0.82 |
| | | | | 600 | 4.80 | 34.18 | 0.35 | 27.07 | 106 | 0.93 |
| | | | | 700 | 4.60 | 34.24 | 0.17 | 27.14 | 100 | 1.04 |
| | | | | 800 | 4.54 | 34.32 | 0.19 | 27.21 | 95 | 1.14 |



a) First cast.

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm$^3$/g | dyn. m |

BROWN BEAR; May 5, 1952; 0554 GCT; 48°32'N, 126°08'W; sounding, 177 fm; wind, 320°, 14 kt; weather, clear; wire angle, 15°. 55

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | 32.47 | 6.74 | 0 | | 32.47 | 6.74 | | | |
| 5 | 8.25 | 32.56 | 6.80 | 10 | 8.22 | 32.43 | 6.81 | 25.25 | 273 | |
| 10 | 8.22 | 32.43 | 6.81 | 20 | 8.03 | 32.47 | 6.82 | 25.31 | 268 | |
| 19 | 8.04 | 32.47 | 6.78 | 30 | 7.94 | 32.45 | 7.00 | 25.30 | 268 | |
| 29 | 7.94 | 32.45 | 7.02 | 50 | 7.88 | 32.50 | 6.44 | 25.35 | 264 | |
| 48 | 7.92 | 32.46 | 6.54 | 75 | 7.43 | 32.91 | 5.35 | 25.74 | 228 | |
| 97 | 7.13 | 33.23 | 4.54 | 100 | 7.12 | 33.27 | 4.46 | 26.06 | 197 | |
| 193 | 6.77 | 34.04 | 2.64 | 150 | 6.96 | 33.78 | 3.33 | 26.49 | 158 | |
| 290 | 6.13 | 34.00 | 2.04 | 200 | 6.73 | 34.07 | 2.55 | 26.74 | 134 | |
| | | | | 250 | 6.43 | 34.12 | 2.13 | 26.82 | 127 | |

BROWN BEAR; May 5, 1952; 1639 GCT; 49°02'N, 127°25'W; sounding, 1100 fm; wind, 340°, 14 kt; weather, clear; wire angle, ±15°, 7-10°. 56

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.18 | 32.52 | 6.33 | 0 | 8.18 | 32.52 | 6.33 | 25.32 | 266 | 0.00 |
| 5 | 8.17 | 32.55 | 6.68 | 10 | 8.16 | 32.55 | 6.68 | 25.35 | 264 | 0.03 |
| 10 | 8.16 | 32.55 | 6.68 | 20 | 8.05 | 32.54 | 6.66 | 25.36 | 263 | 0.05 |
| 20 | 8.05 | 32.54 | 6.66 | 30 | 7.78 | 32.57 | 6.66 | 25.42 | 257 | 0.08 |
| 30 | 7.78 | 32.57 | 6.66 | 50 | 7.73 | 32.57 | 6.63 | 25.43 | 257 | 0.13 |
| 49 | 7.76 | 32.56 | 6.66 | 75 | 7.16 | 32.89 | 5.86 | 25.76 | 226 | 0.19 |
| 98 | 6.74 | 33.15 | 5.21 | 100 | 6.73 | 33.17 | 5.17 | 26.04 | 199 | 0.24 |
| 197 | 6.06 | 33.86 | - | 150 | 6.39 | 33.61 | 4.28 | 26.43 | 163 | 0.33 |
| | | | | 200 | 6.04 | 33.86 | 3.49 | 26.67 | 141 | 0.41 |
| 292a) | 5.35 | 33.90 | 2.36 | 250 | 5.65 | 33.88 | 2.83 | 26.73 | 135 | 0.48 |
| 390 | 4.77 | 33.97 | 1.58 | 300 | 5.29 | 33.91 | 2.30 | 26.80 | 129 | 0.54 |
| 585 | 4.54 | 34.16 | 0.47 | 400 | 4.77 | 33.98 | 1.49 | 26.92 | 119 | 0.67 |
| 779 | 4.02 | 34.31 | 0.59 | 500 | 4.68 | 34.08 | 0.81 | 27.00 | 111 | 0.78 |
| 974 | 3.55 | 34.39 | 0.37 | 600 | 4.50 | 34.17 | 0.49 | 27.10 | 104 | 0.89 |
| 1462 | 2.52 | 34.52 | 0.75 | 700 | 4.23 | 34.26 | 0.58 | 27.20 | 95 | 0.99 |
| 1948 | 1.95 | 34.59 | 1.43 | 800 | 3.97 | 34.32 | 0.56 | 27.27 | 88 | 1.08 |
| | | | | 1000 | 3.48 | 34.40 | 0.38 | 27.38 | 78 | 1.25 |
| | | | | 1200 | 3.02 | 34.46 | 0.50 | 27.47 | 70 | 1.39 |
| | | | | 1500 | 2.46 | 34.53 | 0.80 | 27.58 | 60 | 1.59 |

BROWN BEAR; May 6, 1952; 0245 GCT; 49°10'N, 128°48'W; sounding, 1350 fm; wind, 320°, 20 kt; weather, partly cloudy; wire angle, 10°. 57

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.33 | 32.68 | 6.66 | 0 | 8.33 | 32.68 | 6.66 | 25.43 | 256 | 0.00 |
| 5 | 8.32 | 32.68 | 6.70 | 10 | 8.29 | 32.67 | 7.12 | 25.43 | 256 | 0.03 |
| 10 | 8.29 | 32.67 | 7.12 | 20 | 8.18 | 32.68 | 7.12 | 25.45 | 254 | 0.05 |
| 20 | 8.18 | 32.68 | 7.12 | 30 | 7.90 | 32.69 | 6.40 | 25.50 | 250 | 0.08 |
| 30 | 7.90 | 32.69 | 6.40 | | | | | | | |
| 49 | 7.83 | 33.43 | 6.23 | | | | | | | |

BROWN BEAR; May 6, 1952; 2012 GCT; 49°58'N, 128°41'W; sounding, 1060 fm; wind, 320°, 23 kt; weather, clear; wire angle, 28-30°, 15°. 58

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.75 | 32.58 | 6.66 | 0 | 7.75 | 32.58 | 6.66 | 25.43 | 255 | 0.00 |
| 5 | 7.69 | 32.59 | 6.85 | 10 | 7.70 | 32.59 | 6.74 | 25.45 | 254 | 0.02 |
| 10 | 7.70 | 32.59 | 6.74 | 20 | 7.66 | 32.58 | 6.73 | 25.45 | 254 | 0.05 |
| 19 | 7.66 | 32.58 | 6.74 | 30 | 7.62 | 32.58 | 6.66 | 25.45 | 254 | 0.08 |
| 29 | 7.63 | 32.58 | 6.66 | 50 | 7.32 | 32.59 | 6.61 | 25.50 | 250 | 0.12 |
| 48 | 7.36 | 32.58 | 6.63 | 75 | 6.93 | 32.73 | 6.24 | 25.66 | 234 | 0.19 |
| 97 | 6.67 | 32.89 | 5.80 | 100 | 6.66 | 32.94 | 5.66 | 25.87 | 216 | 0.24 |
| 193 | 6.37 | 33.91 | 2.54 | 150 | 6.53 | 33.58 | 3.64 | 26.39 | 167 | 0.34 |
| | | | | 200 | 6.34 | 33.91 | 2.50 | 26.67 | 141 | 0.42 |
| 273a) | 5.99 | 33.95 | 2.05 | 250 | 6.11 | 33.94 | 2.17 | 26.72 | 136 | 0.48 |
| 366 | 5.43 | 33.99 | 1.66 | 300 | 5.81 | 33.96 | 1.95 | 26.78 | 132 | 0.55 |
| 554 | 4.76 | 34.14 | 0.41 | 400 | 5.31 | 34.02 | 1.38 | 26.88 | 122 | 0.68 |
| 742 | 4.01 | 34.26 | - | 500 | 4.96 | 34.10 | 0.69 | 26.99 | 113 | 0.80 |
| 935 | 3.46 | 34.35 | 0.31 | 600 | 4.56 | 34.17 | 0.38 | 27.09 | 104 | 0.90 |
| 1213 | 2.83 | 34.44 | 0.55 | 700 | 4.16 | 34.24 | 0.31 | 27.19 | 95 | 1.00 |
| 1590 | 2.22 | 34.55 | 0.29 | 800 | 3.83 | 34.29 | 0.29 | 27.26 | 89 | 1.10 |
| | | | | 1000 | 3.30 | 34.37 | 0.40 | 27.38 | 78 | 1.26 |
| | | | | 1200 | 2.86 | 34.44 | 0.55 | 27.47 | 69 | 1.41 |
| | | | | 1500 | 2.34 | 34.52 | 0.41 | 27.58 | 59 | 1.60 |



a) First cast.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | δ cl/ton | ΔD dyn m | |
| BROWN BEAR; July 3, 1952; 0837 GCT;[a] 48°30'N, 124°43'W; sounding, 130 fm; wind, 290°, 8 kt; weather, intermittent moderate drizzle; wire angle, missing, missing. | | | | | | | | | | | | 121 |
| 0 | 10.95 | 31.34 | 5.68 | 2.11 | 0 | 10.95 | 31.34 | 5.68 | 23.96 | 396 | 0.00 | |
| 5 | 9.57 | 31.56 | 5.30 | 2.11 | 10 | 8.83 | 32.13 | 4.36 | 24.92 | 304 | 0.04 | |
| 10 | 8.83 | 32.13 | 4.36 | 2.42 | 20 | 8.85 | 32.36 | 4.37 | 25.10 | 288 | 0.06 | |
| | | | | | 30 | 8.50 | 32.52 | 4.31 | 25.28 | 271 | 0.09 | |
| 20 | 8.85 | 32.36 | 4.37 | 2.42 | 50 | 7.30 | 32.77 | 4.47 | 25.65 | 236 | 0.14 | |
| 30 | 8.50 | 32.52 | 4.31 | 2.37 | 75 | 6.82 | 33.46 | 2.25 | 26.25 | 179 | 0.20 | |
| 50 | 7.30 | 32.77 | 4.47 | 2.15 | 100 | 6.39 | 33.74 | 1.88 | 26.53 | 153 | 0.24 | |
| 75 | 6.82 | 33.46 | 2.25 | 2.88 | 150 | 6.23 | 33.86 | 1.72 | 26.65 | 142 | 0.31 | |
| 100 | 6.39 | 33.74 | 1.88 | 2.88 | 200 | 6.04 | 33.91 | 1.85 | 26.71 | 137 | 0.38 | |
| 150 | 6.23 | 33.86 | 1.72 | 2.88 | | | | | | | | |
| 200 | 6.04 | 33.91 | 1.85 | 2.88 | | | | | | | | |
| BROWN BEAR; July 4, 1952; 1435 GCT; 48°29'N, 125°42'W; sounding, 52 fm; wind, 290°, 16 kt; weather, cloudy; wire angle, missing. | | | | | | | | | | | | 122 |
| 0 | 10.74 | 31.36 | 7.35 | 0.62 | 0 | 10.74 | 31.36 | 7.35 | 24.01 | 391 | 0.00 | |
| 5 | 11.59 | 31.38 | 7.35 | 0.90 | 10 | 9.50 | 31.78 | 5.23 | 24.54 | 340 | 0.04 | |
| 10 | 9.50 | 31.78 | 5.23 | 2.04 | 20 | 8.48 | 32.09 | 3.70 | 24.94 | 302 | 0.07 | |
| 20 | 8.48 | 32.09 | 3.70 | 2.44 | 30 | 8.27 | 32.21 | 3.49 | 25.07 | 291 | 0.10 | |
| 30 | 8.27 | 32.21 | 3.49 | 2.59 | 50 | 7.99 | 32.40 | 3.27 | 25.26 | 273 | 0.16 | |
| 50 | 7.99 | 32.40 | 3.27 | 2.39 | 75 | 7.52 | 32.95 | 2.59 | 25.76 | 226 | 0.22 | |
| 75 | 7.52 | 32.95 | 2.59 | 2.75 | | | | | | | | |
| 90 | 7.34 | 33.09 | 2.45 | 3.11 | | | | | | | | |
| BROWN BEAR; July 5, 1952; 0232 GCT; 48°32'N, 127°37'W; sounding, 1395 fm; wind, 290°, 8 kt; weather, partly cloudy; wire angle, 00°. | | | | | | | | | | | | 123 |
| 0 | 13.34 | 32.53 | 6.05 | | 0 | 13.34 | 32.53 | 6.05 | 24.44 | 350 | 0.00 | |
| 5 | 13.36 | 32.51 | 5.99 | | 10 | 13.31 | 32.52 | 5.91 | 24.43 | 351 | 0.04 | |
| 10 | 13.31 | 32.52 | 5.91 | | 20 | 12.81 | 32.53 | 6.08 | 24.54 | 341 | 0.07 | |
| 20 | 12.81 | 32.53 | 6.08 | | 30 | 10.77 | 32.56 | 6.61 | 24.94 | 303 | 0.10 | |
| 30 | 10.77 | 32.56 | 6.61 | | 50 | 8.38 | 32.52 | 6.40 | 25.29 | 269 | 0.16 | |
| 50 | 8.38 | 32.52 | 6.40 | | 75 | 7.62 | 32.85 | 5.51 | 25.66 | 235 | 0.22 | |
| 100 | 7.02 | 33.14 | 4.73 | | 100 | 7.02 | 33.14 | 4.73 | 25.97 | 205 | 0.28 | |
| 196 | 6.29 | 33.88 | 2.74 | | 150 | 6.64 | 33.59 | 3.57 | 26.38 | 168 | 0.37 | |
| 292 | 5.54 | 34.12 | 1.77 | | 200 | 6.25 | 33.89 | 2.70 | 26.67 | 141 | 0.45 | |
| 485 | 4.70 | 34.12 | 0.62 | | 250 | 5.84 | 34.03 | 2.16 | 26.83 | 126 | 0.51 | |
| 727 | 3.98 | 34.32 | 0.34 | | 300 | 5.50 | 34.12 | 1.70 | 26.94 | 116 | 0.58 | |
| 972 | 3.35 | 34.38 | 0.28 | | 400 | 5.04 | 34.10 | 1.02 | 26.98 | 113 | 0.69 | |
| 1450 | 2.54 | 34.48 | 0.59 | | 500 | 4.65 | 34.14 | 0.59 | 27.06 | 106 | 0.80 | |
| 1923 | 1.95 | 34.59 | 1.27 | | 600 | 4.35 | 34.23 | 0.46 | 27.16 | 97 | 0.90 | |
| | | | | | 700 | 4.06 | 34.30 | 0.36 | 27.25 | 90 | 1.00 | |
| | | | | | 800 | 3.78 | 34.34 | 0.30 | 27.31 | 84 | 1.08 | |
| | | | | | 1000 | 3.30 | 34.39 | 0.29 | 27.39 | 77 | 1.24 | |
| | | | | | 1200 | 2.94 | 34.43 | 0.38 | 27.46 | 71 | 1.39 | |
| | | | | | 1500 | 2.47 | 34.49 | 0.65 | 27.55 | 63 | 1.59 | |

a) Times reported are those of the messenger release of the first cast.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **124** | BROWN BEAR; July 5, 1952; 1441 GCT; 48°30'N, 129°45'W; sounding, 1300 fm; wind, 270°, 1 kt; weather, partly cloudy; wire angle, 17°, 20°. | | | | | | | | | | |
| 0 | 12.60 | 32.52 | 6.09 | | 0 | 12.60 | 32.52 | 6.09 | 24.57 | 337 | 0.00 |
| 5 | 12.62 | 32.52 | 6.07 | | 10 | 12.58 | 32.52 | 6.05 | 24.58 | 337 | 0.03 |
| 10 | 12.58 | 32.52 | 6.05 | | 20 | 12.07 | 32.51 | 6.16 | 24.67 | 329 | 0.07 |
| 20 | 12.07 | 32.51 | 6.16 | | 30 | 10.40 | 32.52 | 6.46 | 24.97 | 300 | 0.10 |
| 30 | 10.40 | 32.52 | 6.46 | | 50 | 8.39 | 32.61 | 6.08 | 25.36 | 263 | 0.15 |
| 49 | 8.39 | 32.59 | 6.13 | | 75 | 8.29 | 33.08 | 5.15 | 25.75 | 227 | 0.22 |
| 98 | 8.18 | 33.41 | 4.40 | | 100 | 8.17 | 33.42 | 4.35 | 26.03 | 200 | 0.27 |
| 197 | 7.53 | 33.78 | 2.43 | | 150 | 7.86 | 33.63 | 3.18 | 26.24 | 181 | 0.36 |
| 295 | 6.74 | 33.94 | 1.96 | | 200 | 7.50 | 33.79 | 2.42 | 26.42 | 165 | 0.45 |
| 490 | 5.35 | 34.05 | 0.94 | | 250 | 7.10 | 33.88 | 2.18 | 26.54 | 154 | 0.53 |
| 728 | 4.22 | 34.20 | 0.37 | | 300 | 6.70 | 33.94 | 1.93 | 26.65 | 144 | 0.60 |
| 982 | 3.48 | 34.33 | 0.20 | | 400 | 5.94 | 34.00 | 1.34 | 26.79 | 132 | 0.74 |
| 1479 | 2.49 | 34.52 | 0.59 | | 500 | 5.29 | 34.06 | 0.91 | 26.92 | 120 | 0.87 |
| 1977 | 2.00 | 34.60 | 1.32 | | 600 | 4.78 | 34.12 | 0.63 | 27.02 | 110 | 0.98 |
| | | | | | 700 | 4.33 | 34.18 | 0.41 | 27.12 | 102 | 1.09 |
| | | | | | 800 | 3.99 | 34.24 | 0.29 | 27.21 | 94 | 1.19 |
| | | | | | 1000 | 3.44 | 34.34 | 0.21 | 27.34 | 82 | 1.36 |
| | | | | | 1200 | 2.98 | 34.43 | 0.34 | 27.45 | 72 | 1.52 |
| | | | | | 1500 | 2.46 | 34.53 | 0.62 | 27.58 | 60 | 1.72 |
| **126** | BROWN BEAR; July 6, 1952; 1456 GCT; 48°30'N, 133°27'W; sounding, 1700 fm; wind, 140°, 10 kt; weather, light fog; wire angle, 17°. | | | | | | | | | | |
| 0 | 11.57 | 32.63 | 6.16 | 0.95 | 0 | 11.57 | 32.63 | 6.16 | 24.85 | 311 | 0.00 |
| 5 | 11.55 | 32.65 | 6.18 | 0.95 | 10 | 11.53 | 32.66 | 6.08 | 24.88 | 308 | 0.03 |
| 10 | 11.53 | 32.66 | 6.08 | 1.02 | 20 | 11.51 | 32.66 | 5.77 | 24.89 | 308 | 0.06 |
| 20 | 11.51 | 32.66 | 5.77 | 1.07 | 30 | 11.50 | 32.65 | 6.08 | 24.88 | 309 | 0.09 |
| 30 | 11.50 | 32.65 | 6.08 | 0.97 | 50 | 8.91 | 32.67 | 6.63 | 25.33 | 266 | 0.15 |
| 50 | 8.91 | 32.67 | 6.63 | 1.15 | 75 | 7.53 | 32.62 | 6.59 | 25.50 | 251 | 0.22 |
| 100 | 6.53 | 32.67 | 6.37 | 1.34 | 100 | 6.53 | 32.67 | 6.37 | 25.67 | 234 | 0.28 |
| 200 | 6.40 | 33.86 | 3.92 | 2.00 | 150 | 6.60 | 33.41 | 4.95 | 26.24 | 181 | 0.38 |
| 300 | 5.22 | 33.86 | 3.01 | 2.43 | 200 | 6.40 | 33.86 | 3.92 | 26.62 | 145 | 0.46 |
| 500 | 4.15 | 34.00 | 1.18 | 3.26 | 250 | 5.76 | 33.85 | 3.47 | 26.70 | 139 | 0.53 |
| | | | | | 300 | 5.22 | 33.86 | 3.01 | 26.77 | 132 | 0.60 |
| | | | | | 400 | 4.47 | 33.91 | 2.09 | 26.89 | 121 | 0.73 |
| | | | | | 500 | 4.15 | 34.00 | 1.18 | 27.00 | 111 | 0.84 |
| **127** | BROWN BEAR; July 7, 1952; 0307 GCT; 48°30'N, 135°30'W; sounding, 2100 fm; wind, 200°, 12 kt; weather, clear; wire angle, 19°. | | | | | | | | | | |
| 0 | 11.31 | 32.58 | - | 0.71 | 0 | 11.31 | 32.58 | | 24.86 | 310 | 0.00 |
| 5 | 11.24 | 32.59 | 5.86 | 0.72 | 10 | 11.00 | 32.60 | 6.27 | 24.93 | 304 | 0.03 |
| 10 | 11.00 | 32.60 | 6.27 | 0.86 | 20 | 10.76 | 32.57 | 6.24 | 24.95 | 302 | 0.06 |
| 19 | 10.83 | 32.57 | 6.22 | 0.77 | 30 | 9.66 | 32.60 | 6.31 | 25.16 | 282 | 0.09 |
| 28 | 10.02 | 32.60 | 6.34 | 0.88 | 50 | 7.12 | 32.63 | 6.20 | 25.56 | 244 | 0.14 |
| 47 | 7.21 | 32.64 | 6.15 | 1.02 | 75 | 6.45 | 32.61 | 6.45 | 25.63 | 237 | 0.20 |
| 94 | 6.05 | 32.67 | 6.44 | 1.04 | 100 | 6.00 | 32.78 | 6.24 | 25.82 | 220 | 0.26 |
| 187 | 5.36 | 33.81 | 3.85 | 1.85 | 150 | 5.63 | 33.50 | 4.75 | 26.44 | 162 | 0.36 |
| 268 | 4.79 | 33.85 | 2.54 | 2.25 | 200 | 5.25 | 33.82 | 3.61 | 26.73 | 134 | 0.43 |
| 413 | 4.27 | 33.97 | 1.42 | 2.40 | 250 | 4.90 | 33.84 | 2.79 | 26.79 | 129 | 0.50 |
| 588 | 3.90 | 34.16 | 0.60 | 2.66 | 300 | 4.66 | 33.87 | 2.26 | 26.84 | 125 | 0.56 |
| 766 | 3.39 | 34.27 | 0.41 | 2.76 | 400 | 4.31 | 33.96 | 1.50 | 26.95 | 115 | 0.68 |
| 1157 | 2.68 | 34.42 | 0.39 | 2.65 | 500 | 4.10 | 34.07 | 0.94 | 27.06 | 106 | 0.79 |
| 1570 | 2.25 | 34.50 | 0.75 | 2.38 | 600 | 3.86 | 34.17 | 0.59 | 27.16 | 96 | 0.89 |
| | | | | | 700 | 3.57 | 34.23 | 0.47 | 27.24 | 89 | 0.98 |
| | | | | | 800 | 3.32 | 34.29 | 0.40 | 27.31 | 83 | 1.07 |
| | | | | | 1000 | 2.93 | 34.37 | 0.36 | 27.41 | 74 | 1.22 |
| | | | | | 1200 | 2.62 | 34.43 | 0.41 | 27.49 | 68 | 1.37 |
| | | | | | 1500 | 2.30 | 34.49 | 0.66 | 27.56 | 61 | 1.56 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BROWN BEAR; July 7, 1952; 1032 GCT; 48°30'N, 136°30'W; sounding, 2173 fm; wind, 040°, 12 kt; weather, light fog; wire angle, 10°. 128

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.74 | 32.58 | 6.31 | 0 | 10.74 | 32.58 | 6.31 | 24.96 | 300 | 0.00 |
| 5 | 10.70 | 32.59 | 6.46 | 10 | 10.71 | 32.58 | 5.80 | 24.97 | 300 | 0.03 |
| 10 | 10.71 | 32.58 | 5.80 | 20 | 10.43 | 32.59 | 6.48 | 25.02 | 295 | 0.06 |
| 20 | 10.43 | 32.59 | 6.48 | 30 | 10.34 | 32.59 | 5.60 | 25.04 | 294 | 0.09 |
| 30 | 10.34 | 32.59 | 5.60 | 50 | 6.91 | 32.66 | 4.91 | 25.61 | 239 | 0.14 |
| 50 | 6.91 | 32.66 | 4.91 | 75 | 6.23 | 32.63 | 4.91 | 25.68 | 233 | 0.20 |
| 99 | 5.73 | 32.69 | 4.83 | 100 | 5.73 | 32.71 | 4.82 | 25.80 | 222 | 0.26 |
| 197 | 5.32 | 33.81 | 3.58 | 150 | 5.57 | 33.40 | 4.20 | 26.36 | 169 | 0.36 |
| 296 | 4.51 | 33.89 | 2.18 | 200 | 5.29 | 33.81 | 3.54 | 26.72 | 135 | 0.43 |
| 492 | 3.87 | 34.07 | 0.86 | 250 | 4.85 | 33.85 | 2.78 | 26.80 | 128 | 0.50 |
| 739 | 3.45 | 34.25 | 0.48 | 300 | 4.49 | 33.89 | 2.15 | 26.87 | 121 | 0.56 |
| 985 | 2.99 | 34.46 | 0.32 | 400 | 4.14 | 33.99 | 1.37 | 26.99 | 111 | 0.68 |
| 1476 | 2.38 | 34.38 | 0.45 | 500 | 3.86 | 34.08 | 0.85 | 27.09 | 102 | 0.78 |
| 1970 | 1.95 | 34.58 | 1.13 | 600 | 3.69 | 34.14 | 0.67 | 27.16 | 97 | 0.88 |
| | | | | 700 | 3.52 | 34.22 | 0.53 | 27.24 | 90 | 0.98 |
| | | | | 800 | 3.33 | 34.32 | 0.43 | 27.33 | 81 | 1.06 |
| | | | | 1000 | 2.97 | 34.45 | 0.32 | 27.47 | 69 | 1.21 |
| | | | | 1200 | 2.70 | 34.39 | 0.31 | 27.45 | 71 | 1.35 |
| | | | | 1500 | 2.35 | 34.38 | 0.47 | 27.47 | 70 | 1.56 |

BROWN BEAR; July 8, 1952; 0248 GCT; 49°30'N, 138°14'W; sounding, missing; wind, 200°, 15 kt; weather, light fog; wire angle, 18°. 129

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.14 | 32.57 | 6.56 | 0 | 10.14 | 32.57 | 6.56 | 25.05 | 292 | 0.00 |
| 5 | 10.12 | 32.58 | 6.66 | 10 | 10.10 | 32.58 | 6.83 | 25.07 | 290 | 0.03 |
| 10 | 10.10 | 32.58 | 6.83 | 20 | 9.89 | 32.58 | 6.82 | 25.10 | 287 | 0.06 |
| 19 | 9.87 | 32.58 | 6.87 | 30 | 9.28 | 32.58 | 6.65 | 25.20 | 278 | 0.09 |
| 28 | 9.70 | 32.57 | 6.62 | 50 | 6.38 | 32.62 | 6.92 | 25.65 | 236 | 0.14 |
| 47 | 6.44 | 32.63 | 6.90 | 75 | 5.97 | 32.60 | 6.94 | 25.68 | 232 | 0.20 |
| 94 | 5.73 | 32.65 | 6.75 | 100 | 5.73 | 32.76 | 6.45 | 25.84 | 218 | 0.25 |
| 188 | 5.41 | 33.84 | 3.25 | 150 | 5.63 | 33.50 | 4.36 | 26.44 | 162 | 0.35 |
| 282 | 4.33 | 33.84 | 2.34 | 200 | 5.23 | 33.83 | 3.14 | 26.74 | 133 | 0.42 |
| 456 | 4.32 | 34.10 | 0.58 | 250 | 4.61 | 33.83 | 2.65 | 26.81 | 127 | 0.48 |
| 684 | 3.77 | 34.27 | 0.43 | 300 | 4.35 | 33.87 | 2.09 | 26.87 | 121 | 0.55 |
| 918 | 3.09 | 34.35 | 0.43 | 400 | 4.36 | 34.03 | 1.00 | 27.00 | 110 | 0.66 |
| 1410 | 2.45 | 34.48 | 0.53 | 500 | 4.22 | 34.14 | 0.54 | 27.10 | 102 | 0.77 |
| 1880 | 2.03 | 34.59 | 1.16 | 600 | 3.99 | 34.22 | 0.47 | 27.19 | 94 | 0.87 |
| | | | | 700 | 3.72 | 34.28 | 0.43 | 27.26 | 87 | 0.96 |
| | | | | 800 | 3.40 | 34.31 | 0.43 | 27.32 | 82 | 1.04 |
| | | | | 1000 | 3.12 | 34.33 | 0.21 | 27.36 | 79 | 1.20 |
| | | | | 1200 | 3.11 | 34.32 | 0.08 | 27.35 | 81 | 1.36 |
| | | | | 1500 | 2.83 | 34.38 | 0.03 | 27.43 | 75 | 1.60 |

BROWN BEAR; July 8, 1952; 1730 GCT; 50°34'N, 139°46'W; sounding, 2100 fm; wind, 140°, 4 kt; weather, light fog; wire angle, 05°. 130

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.41 | 32.60 | 6.50 | 1.15 | 0 | 9.41 | 32.60 | 6.50 | 25.20 | 278 | 0.00 |
| 5 | 9.35 | 32.59 | 6.57 | 1.18 | 10 | 9.32 | 32.57 | 6.54 | 25.19 | 279 | 0.03 |
| 10 | 9.32 | 32.57 | 6.54 | 1.16 | 20 | 9.27 | 32.57 | 6.55 | 25.20 | 278 | 0.06 |
| 20 | 9.27 | 32.57 | 6.55 | 1.14 | 30 | 9.25 | 32.57 | 6.46 | 25.20 | 278 | 0.08 |
| 30 | 9.25 | 32.57 | 6.46 | 1.14 | 50 | 7.23 | 32.66 | 6.69 | 25.57 | 243 | 0.14 |
| 50 | 7.23 | 32.66 | 6.69 | 1.46 | 75 | 5.98 | 32.66 | 6.87 | 25.73 | 228 | 0.20 |
| 100 | 5.06 | 32.73 | 6.72 | 1.62 | 100 | 5.06 | 32.73 | 6.72 | 25.89 | 213 | 0.25 |
| 200 | 4.61 | 33.81 | 2.95 | 2.86 | 150 | 4.83 | 33.39 | 4.55 | 26.44 | 161 | 0.34 |
| 300 | 4.19 | 33.90 | 1.42 | 3.28 | 200 | 4.61 | 33.81 | 2.95 | 26.80 | 128 | 0.42 |
| 500 | 3.84 | 34.11 | 0.66 | 3.34 | 250 | 4.38 | 33.85 | 2.09 | 26.85 | 123 | 0.48 |
| 750 | 3.43 | 34.28 | 0.40 | 3.46 | 300 | 4.19 | 33.90 | 1.42 | 26.91 | 118 | 0.54 |
| 1000 | 3.01 | 34.33 | 0.37 | 3.47 | 400 | 4.01 | 34.01 | 0.97 | 27.02 | 108 | 0.65 |
| 1500 | 2.37 | 34.51 | 0.67 | 3.21 | 500 | 3.84 | 34.11 | 0.66 | 27.12 | 100 | 0.76 |
| 2000 | 1.95 | 34.51 | 1.06 | 3.00 | 600 | 3.68 | 34.19 | 0.53 | 27.20 | 93 | 0.85 |
| | | | | | 700 | 3.51 | 34.26 | 0.44 | 27.27 | 87 | 0.94 |
| | | | | | 800 | 3.34 | 34.29 | 0.39 | 27.31 | 83 | 1.03 |
| | | | | | 1000 | 3.01 | 34.33 | 0.37 | 27.37 | 78 | 1.19 |
| | | | | | 1200 | 2.73 | 34.42 | 0.48 | 27.47 | 69 | 1.33 |
| | | | | | 1500 | 2.37 | 34.51 | 0.67 | 27.57 | 60 | 1.53 |
| | | | | | 2000 | 1.95 | 34.51 | 1.06 | 27.61 | 58 | 1.82 |

UW

BB-7

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 131 | BROWN BEAR; July 9, 1952; 0657 GCT; 50°30'N, 137°30'W; sounding, 2050 fm; wind, 270°, 4 kt; weather, fog; wire angle, 00°. | | | | | | | | | | |
| 0 | 11.21 | 32.53 | 6.29 | | 0 | 11.21 | 32.53 | 6.29 | 24.84 | 312 | 0.00 |
| 5 | 10.30 | 32.55 | 6.43 | | 10 | 10.20 | 32.55 | 6.40 | 25.03 | 294 | 0.03 |
| 10 | 10.20 | 32.55 | 6.40 | | 20 | 10.00 | 32.55 | 6.38 | 25.06 | 291 | 0.06 |
| 20 | 10.00 | 32.55 | 6.38 | | 30 | 9.19 | 32.57 | | 25.21 | 277 | 0.09 |
| 30 | 9.19 | 32.57 | - | | 50 | 5.95 | 32.64 | 6.47 | 25.72 | 229 | 0.14 |
| 50 | 5.95 | 32.64 | 6.47 | | 75 | 5.58 | 32.77 | 6.12 | 25.87 | 215 | 0.19 |
| 100 | 5.31 | 32.92 | 5.64 | | 100 | 5.31 | 32.92 | 5.64 | 26.02 | 201 | 0.25 |
| 200 | 5.33 | 33.83 | 2.76 | | 150 | 5.35 | 33.47 | 4.00 | 26.45 | 161 | 0.34 |
| 300 | 5.15 | 33.95 | 1.48 | | 200 | 5.33 | 33.83 | 2.76 | 26.73 | 134 | 0.41 |
| 500 | 4.31 | 34.09 | 0.60 | | 250 | 5.26 | 33.89 | 2.05 | 26.79 | 130 | 0.48 |
| 750 | 3.63 | 34.25 | 0.38 | | 300 | 5.15 | 33.95 | 1.48 | 26.85 | 124 | 0.54 |
| 1000 | 3.07 | 34.36 | 0.35 | | 400 | 4.70 | 34.02 | 0.96 | 26.95 | 115 | 0.66 |
| 1500 | 2.36 | 34.51 | 0.39 | | 500 | 4.31 | 34.09 | 0.60 | 27.05 | 106 | 0.77 |
| 2000 | 1.95 | 34.57 | 1.27 | | 600 | 4.02 | 34.16 | 0.49 | 27.14 | 99 | 0.88 |
| | | | | | 700 | 3.76 | 34.22 | 0.41 | 27.21 | 92 | 0.97 |
| | | | | | 800 | 3.51 | 34.27 | 0.37 | 27.28 | 87 | 1.06 |
| | | | | | 1000 | 3.07 | 34.36 | 0.35 | 27.39 | 76 | 1.22 |
| | | | | | 1200 | 2.75 | 34.43 | 0.27 | 27.47 | 69 | 1.37 |
| | | | | | 1500 | 2.36 | 34.51 | 0.39 | 27.57 | 60 | 1.56 |
| | | | | | 2000 | 1.95 | 34.57 | 1.27 | 27.65 | 53 | 1.84 |
| 132 | BROWN BEAR; July 9, 1952; 1033 GCT; 50°30'N, 137°18'W; sounding, 2080 fm; wind, 180°, 1 kt; weather, fog; wire angle, 08°. | | | | | | | | | | |
| 0 | 11.07 | 32.56 | 6.22 | | 0 | 11.07 | 32.56 | 6.22 | 24.89 | 308 | 0.00 |
| 5 | 10.36 | 32.56 | 6.24 | | 10 | 10.26 | 32.56 | 6.27 | 25.03 | 294 | 0.03 |
| 10 | 10.26 | 32.56 | 6.27 | | 20 | 9.95 | 32.56 | 6.33 | 25.08 | 290 | 0.06 |
| 20 | 9.95 | 32.56 | 6.33 | | 30 | 8.44 | 32.59 | 6.59 | 25.34 | 265 | 0.09 |
| 30 | 8.44 | 32.59 | 6.59 | | 50 | 5.92 | 32.66 | 6.55 | 25.74 | 227 | 0.14 |
| 50 | 5.92 | 32.66 | 6.55 | | 75 | 5.50 | 32.76 | 6.22 | 25.87 | 215 | 0.19 |
| 100 | 5.20 | 32.90 | 5.75 | | 100 | 5.20 | 32.90 | 5.75 | 26.01 | 201 | 0.24 |
| 200 | 5.26 | 33.85 | 2.45 | | 150 | 5.25 | 33.48 | 3.83 | 26.46 | 159 | 0.33 |
| 300 | 5.15 | 33.97 | 1.34 | | 200 | 5.26 | 33.85 | 2.45 | 26.76 | 132 | 0.41 |
| 500 | 4.31 | 34.13 | 0.58 | | 250 | 5.23 | 33.91 | 1.84 | 26.81 | 128 | 0.47 |
| 750 | 3.67 | 34.26 | 0.38 | | 300 | 5.15 | 33.97 | 1.34 | 26.86 | 123 | 0.53 |
| 1000 | 3.18 | 34.41 | 0.29 | | 400 | 4.69 | 34.06 | 0.90 | 26.99 | 112 | 0.65 |
| | | | | | 500 | 4.31 | 34.13 | 0.58 | 27.08 | 103 | 0.76 |
| | | | | | 600 | 4.04 | 34.18 | 0.49 | 27.15 | 98 | 0.86 |
| | | | | | 700 | 3.79 | 34.23 | 0.41 | 27.22 | 92 | 0.95 |
| | | | | | 800 | 3.56 | 34.29 | 0.36 | 27.29 | 86 | 1.04 |
| | | | | | 1000 | 3.18 | 34.41 | 0.29 | 27.42 | 74 | 1.20 |
| 133 | BROWN BEAR; July 9, 1952; 1328 GCT; 50°30'N, 137°38'W; sounding, 2000 fm; wind, 090°, 3 kt; weather, light fog; wire angle, 07°. | | | | | | | | | | |
| 0 | 11.05 | 32.54 | 6.42 | | 0 | 11.05 | 32.54 | 6.42 | 24.87 | 309 | 0.00 |
| 5 | 10.27 | 32.54 | 6.50 | | 10 | 10.18 | 32.54 | 6.57 | 25.02 | 294 | 0.03 |
| 10 | 10.18 | 32.54 | 6.57 | | 20 | 10.07 | 32.54 | 6.46 | 25.04 | 293 | 0.06 |
| 20 | 10.07 | 32.54 | 6.46 | | 30 | 8.64 | 32.56 | 6.44 | 25.29 | 270 | 0.09 |
| 30 | 8.64 | 32.56 | 6.44 | | 50 | 5.81 | 32.60 | 6.69 | 25.70 | 230 | 0.14 |
| 50 | 5.81 | 32.60 | 6.69 | | 75 | 5.44 | | 6.74 | | | |
| 100 | 5.21 | - | 6.74 | | 100 | 5.21 | | 6.74 | | | |
| 200 | 5.79 | - | 6.13 | | 150 | 5.69 | | 6.82 | | | |
| 300 | 4.89 | - | 2.39 | | 200 | 5.79 | | 6.13 | | | |
| 500 | 4.22 | - | 1.86 | | 250 | 5.29 | | 3.96 | | | |
| 750 | 3.64 | 34.25 | 0.39 | | 300 | 4.89 | | 2.39 | | | |
| 1000 | 3.10 | 34.37 | 0.34 | | 400 | 4.53 | | 2.20 | | | |
| | | | | | 500 | 4.22 | | 1.86 | | | |
| | | | | | 600 | 3.98 | | 1.10 | | | |
| | | | | | 700 | 3.75 | | 0.57 | | | |
| | | | | | 800 | 3.53 | | 0.27 | | | |
| | | | | | 1000 | 3.10 | 34.37 | 0.34 | 27.40 | 76 | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | δ cl/ton | ΔD dyn m | |
| BROWN BEAR; July 9, 1952; 1639 GCT; 50°30'N, 137°18'W; sounding, 2100 fm; wind, 040°, 5 kt; weather, overcast; wire angle, 00°. | | | | | | | | | | | | 134 |
| 0 | 10.58 | 32.55 | 6.53 | | 0 | 10.58 | 32.55 | 6.53 | 24.96 | 300 | 0.00 | |
| 5 | 10.30 | 32.56 | 6.55 | | 10 | 10.22 | 32.57 | 6.50 | 25.04 | 293 | 0.03 | |
| 10 | 10.22 | 32.57 | 6.50 | | 20 | 10.05 | 32.56 | 6.44 | 25.06 | 291 | 0.06 | |
| 20 | 10.05 | 32.56 | 6.44 | | 30 | 8.72 | 32.59 | 6.62 | 25.30 | 269 | 0.09 | |
| 30 | 9.70 | 32.57 | 6.57 | | 50 | 6.66 | 32.66 | 6.78 | 25.64 | 236 | 0.14 | |
| 50 | 6.66 | 32.66 | 6.78 | | 75 | 5.68 | 32.77 | 6.47 | 25.85 | 216 | 0.19 | |
| 100 | 5.01 | 32.92 | 6.01 | | 100 | 5.01 | 32.92 | 6.01 | 26.05 | 198 | 0.25 | |
| 200 | 5.54 | 33.86 | 2.65 | | 150 | 5.42 | 33.50 | 4.04 | 26.46 | 160 | 0.34 | |
| 300 | 4.92 | 33.95 | 1.60 | | 200 | 5.54 | 33.86 | 2.65 | 26.73 | 135 | 0.41 | |
| 500 | 4.36 | 34.14 | 0.58 | | 250 | 5.20 | 33.90 | 2.08 | 26.80 | 128 | 0.48 | |
| 750 | 3.56 | 34.32 | 0.37 | | 300 | 4.92 | 33.95 | 1.60 | 26.87 | 122 | 0.54 | |
| 1000 | 3.14 | 34.43 | 0.32 | | 400 | 4.65 | 34.05 | 1.00 | 26.98 | 112 | 0.65 | |
| | | | | | 500 | 4.36 | 34.14 | 0.58 | 27.09 | 103 | 0.76 | |
| | | | | | 600 | 3.99 | 34.22 | 0.48 | 27.19 | 94 | 0.86 | |
| | | | | | 700 | 3.69 | 34.29 | 0.40 | 27.28 | 86 | 0.95 | |
| | | | | | 800 | 3.45 | 34.35 | 0.35 | 27.35 | 80 | 1.03 | |
| | | | | | 1000 | 3.14 | 34.43 | 0.32 | 27.44 | 72 | 1.19 | |
| BROWN BEAR; July 9, 1952; 1938 GCT; 50°30'N, 137°38'W; sounding, 2050 fm; wind, 070°, 6 kt; weather, overcast; wire angle, 00°. | | | | | | | | | | | | 135 |
| 0 | | 32.56 | 6.53 | | 0 | | 32.56 | 6.53 | | | | |
| 5 | | 32.56 | 6.55 | | 10 | | 32.56 | 6.38 | | | | |
| 10 | | 32.56 | 6.38 | | 20 | | 32.56 | 6.41 | | | | |
| 20 | | 32.56 | 6.41 | | 30 | | 32.60 | 6.63 | | | | |
| 30 | | 32.60 | 6.63 | | 50 | | 32.66 | 6.79 | | | | |
| 50 | | 32.66 | 6.79 | | 75 | | 32.86 | 6.06 | | | | |
| 100 | | 33.07 | 5.33 | | 100 | | 33.07 | 5.33 | | | | |
| 200 | | 33.90 | 2.34 | | 150 | | 33.59 | 3.51 | | | | |
| 300 | | 33.88 | 1.99 | | 200 | | 33.90 | 2.34 | | | | |
| 500 | | 34.08 | 0.82 | | 250 | | 33.88 | 2.18 | | | | |
| 750 | | 34.26 | 0.35 | | 300 | | 33.88 | 1.99 | | | | |
| 1000 | | 34.36 | 0.32 | | 400 | | 33.99 | 1.32 | | | | |
| | | | | | 500 | | 34.08 | 0.82 | | | | |
| | | | | | 600 | | 34.16 | 0.57 | | | | |
| | | | | | 700 | | 34.23 | 0.40 | | | | |
| | | | | | 800 | | 34.29 | 0.30 | | | | |
| | | | | | 1000 | | 34.36 | 0.32 | | | | |
| BROWN BEAR; July 9, 1952; 2248 GCT; 50°30'N, 137°18'W; sounding, 2100 fm; wind, 070°, 3 kt; weather, cloudy; wire angle, 08°. | | | | | | | | | | | | 136 |
| 0 | 11.54 | 32.52 | 6.24 | | 0 | 11.54 | 32.52 | 6.24 | 24.77 | 318 | 0.00 | |
| 5 | 10.94 | 32.55 | 6.44 | | 10 | 10.33 | 32.56 | 6.35 | 25.02 | 295 | 0.03 | |
| 10 | 10.33 | 32.56 | 6.35 | | 20 | 10.16 | 32.56 | 6.41 | 25.04 | 293 | 0.06 | |
| 20 | 10.16 | 32.56 | 6.41 | | 30 | 9.66 | 32.56 | 6.52 | 25.13 | 285 | 0.09 | |
| 30 | 9.66 | 32.56 | 6.52 | | 50 | 6.86 | 32.62 | 6.70 | 25.59 | 242 | 0.14 | |
| 50 | 6.86 | 32.62 | 6.70 | | 75 | 5.59 | 32.71 | 6.66 | 25.82 | 220 | 0.20 | |
| 99 | 4.77 | 32.84 | 6.36 | | 100 | 4.79 | 32.86 | 6.31 | 26.03 | 200 | 0.25 | |
| 197 | 5.55 | 33.86 | 2.42 | | 150 | 5.35 | 33.49 | 4.00 | 26.46 | 159 | 0.34 | |
| 293 | 4.95 | 33.93 | 0.97 | | 200 | 5.53 | 33.86 | 2.36 | 26.73 | 134 | 0.42 | |
| 493 | 4.34 | 34.12 | 0.50 | | 250 | 5.19 | 33.90 | 1.52 | 26.80 | 128 | 0.48 | |
| 740 | 3.57 | 34.23 | 0.39 | | 300 | 4.93 | 33.94 | 0.95 | 26.87 | 123 | 0.54 | |
| 985 | 3.19 | 34.38 | 0.32 | | 400 | 4.63 | 34.04 | 0.68 | 26.98 | 113 | 0.66 | |
| | | | | | 500 | 4.31 | 34.12 | 0.50 | 27.08 | 104 | 0.77 | |
| | | | | | 600 | 3.96 | 34.16 | 0.45 | 27.14 | 98 | 0.87 | |
| | | | | | 700 | 3.67 | 34.21 | 0.40 | 27.21 | 92 | 0.97 | |
| | | | | | 800 | 3.44 | 34.26 | 0.37 | 27.28 | 86 | 1.06 | |

UW

BB-7

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 137 | BROWN BEAR; July 10, 1952; 0121 GCT; 50°30'N, 137°38'W; sounding, 2050 fm; wind, 040°, 8 kt; weather, partly cloudy; wire angle, 10°. | | | | | | | | | | |
| 0 | 12.00 | 32.55 | 6.42 | | 0 | 12.00 | 32.55 | 6.42 | 24.71 | 324 | 0.00 |
| 5 | 10.67 | 32.55 | 6.52 | | 10 | 10.28 | 32.55 | 6.46 | 25.02 | 295 | 0.03 |
| 10 | 10.28 | 32.55 | 6.46 | | 20 | 10.08 | 32.55 | 6.44 | 25.05 | 292 | 0.06 |
| 20 | 10.08 | 32.55 | 6.44 | | 30 | 9.90 | 32.56 | 6.44 | 25.09 | 289 | 0.09 |
| 30 | 9.90 | 32.56 | 6.44 | | 50 | 6.77 | 32.62 | 6.66 | 25.60 | 240 | 0.14 |
| 50 | 6.77 | 32.62 | 6.66 | | 75 | 5.83 | 32.66 | 6.59 | 25.75 | 226 | 0.20 |
| 100 | 5.18 | 32.77 | 6.27 | | 100 | 5.18 | 32.77 | 6.27 | 25.91 | 211 | 0.26 |
| 200 | 5.46 | 33.86 | 2.77 | | 150 | 5.42 | 33.44 | 4.23 | 26.41 | 164 | 0.35 |
| 300 | 4.94 | 33.95 | 1.52 | | 200 | 5.46 | 33.86 | 2.77 | 26.74 | 134 | 0.42 |
| 500 | 4.09 | 34.07 | 0.85 | | 250 | 5.19 | 33.91 | 2.07 | 26.81 | 127 | 0.49 |
| 750 | 3.59 | 34.26 | 0.32 | | 300 | 4.94 | 33.95 | 1.52 | 26.87 | 122 | 0.55 |
| 1000 | 3.15 | 34.37 | 0.31 | | 400 | 4.46 | 34.01 | 1.16 | 26.97 | 113 | 0.67 |
| | | | | | 500 | 4.09 | 34.07 | 0.85 | 27.06 | 105 | 0.78 |
| | | | | | 600 | 3.88 | 34.16 | 0.58 | 27.15 | 97 | 0.88 |
| | | | | | 700 | 3.69 | 34.23 | 0.39 | 27.23 | 91 | 0.97 |
| | | | | | 800 | 3.50 | 34.29 | 0.28 | 27.29 | 85 | 1.06 |
| | | | | | 1000 | 3.15 | 34.37 | 0.31 | 27.39 | 76 | 1.22 |
| 138 | BROWN BEAR; July 10, 1952; 0424 GCT; 50°30'N, 137°18'W; sounding, 2100 fm; wind, 320°, 8 kt; weather, clear; wire angle, 10°. | | | | | | | | | | |
| 0 | 11.69 | 32.56 | 6.32 | | 0 | 11.69 | 32.56 | 6.32 | 24.77 | 318 | 0.00 |
| 5 | 10.51 | 32.56 | 6.41 | | 10 | 10.30 | 32.56 | 6.44 | 25.02 | 295 | 0.03 |
| 10 | 10.30 | 32.56 | 6.44 | | 20 | 10.05 | 32.56 | 6.40 | 25.06 | 291 | 0.06 |
| 20 | 10.05 | 32.56 | 6.40 | | 30 | 8.74 | 32.58 | 6.81 | 25.29 | 270 | 0.09 |
| 30 | 8.74 | 32.58 | 6.81 | | 50 | 6.78 | 32.65 | 6.85 | 25.62 | 238 | 0.14 |
| 50 | 6.78 | 32.65 | 6.85 | | 75 | 5.55 | 32.74 | 6.68 | 25.85 | 217 | 0.20 |
| 99 | 4.72 | 32.87 | 6.32 | | 100 | 4.73 | 32.88 | 6.27 | 26.05 | 198 | 0.25 |
| 199 | 5.05 | 33.77 | 2.98 | | 150 | 4.99 | 33.43 | 4.36 | 26.46 | 160 | 0.34 |
| 297 | 4.57 | 33.90 | 1.67 | | 200 | 5.04 | 33.77 | 2.97 | 26.72 | 136 | 0.41 |
| 493 | 4.15 | 34.15 | 0.58 | | 250 | 4.78 | 33.84 | 2.23 | 26.80 | 128 | 0.48 |
| 739 | 3.63 | 34.29 | 0.34 | | 300 | 4.56 | 33.90 | 1.65 | 26.87 | 121 | 0.54 |
| 986 | 3.07 | 34.40 | 0.35 | | 400 | 4.35 | 34.05 | 1.00 | 27.02 | 109 | 0.65 |
| | | | | | 500 | 4.14 | 34.15 | 0.57 | 27.12 | 100 | 0.76 |
| | | | | | 600 | 3.93 | 34.21 | 0.45 | 27.19 | 94 | 0.86 |
| | | | | | 700 | 3.71 | 34.27 | 0.36 | 27.26 | 88 | 0.95 |
| | | | | | 800 | 3.50 | 34.32 | 0.31 | 27.32 | 83 | 1.03 |
| 139 | BROWN BEAR; July 10, 1952; 0742 GCT; 50°28'N, 137°38'W; sounding, 2050 fm; wind, 320°, 12 kt; weather, cloudy; wire angle, 15°. | | | | | | | | | | |
| 0 | 11.62 | 32.53 | 6.33 | | 0 | 11.62 | 32.53 | 6.33 | 24.76 | 319 | 0.00 |
| 5 | 11.63 | 32.56 | 6.35 | | 10 | 10.39 | 32.55 | 6.43 | 25.00 | 297 | 0.03 |
| 10 | 10.39 | 32.55 | 6.43 | | 20 | 10.21 | 32.54 | 6.35 | 25.02 | 295 | 0.06 |
| 20 | 10.21 | 32.54 | 6.35 | | 30 | 9.45 | 32.56 | 6.48 | 25.16 | 282 | 0.09 |
| 30 | 9.45 | 32.56 | 6.48 | | 50 | 6.65 | 32.63 | 6.55 | 25.62 | 238 | 0.14 |
| 49 | 6.69 | 32.63 | 6.55 | | 75 | 5.70 | 32.71 | 6.32 | 25.80 | 221 | 0.20 |
| 97 | 5.14 | 32.83 | 5.94 | | 100 | 5.17 | 32.88 | 5.78 | 26.00 | 203 | 0.25 |
| 195 | 5.65 | 33.87 | 2.34 | | 150 | 5.53 | 33.51 | 3.65 | 26.46 | 160 | 0.34 |
| 293 | 5.22 | 33.95 | 1.52 | | 200 | 5.63 | 33.87 | 2.30 | 26.73 | 135 | 0.42 |
| 487 | 4.09 | 34.06 | 0.90 | | 250 | 5.42 | 33.92 | 1.84 | 26.79 | 129 | 0.48 |
| 731 | 3.67 | 34.27 | 0.36 | | 300 | 5.17 | 33.95 | 1.50 | 26.85 | 125 | 0.55 |
| 975 | 3.10 | 34.37 | 0.34 | | 400 | 4.51 | 34.00 | 1.15 | 26.96 | 114 | 0.66 |
| 1459 | 2.40 | 34.51 | 0.37 | | 500 | 4.07 | 34.07 | 0.85 | 27.06 | 105 | 0.78 |
| 1950 | 1.98 | 34.60 | 1.18 | | 600 | 3.91 | 34.17 | 0.58 | 27.16 | 97 | 0.88 |
| | | | | | 700 | 3.73 | 34.25 | 0.40 | 27.24 | 90 | 0.97 |
| | | | | | 800 | 3.49 | 34.30 | 0.35 | 27.30 | 84 | 1.06 |
| | | | | | 1000 | 3.06 | 34.38 | 0.32 | 27.41 | 75 | 1.22 |
| | | | | | 1200 | 2.74 | 34.44 | 0.26 | 27.48 | 68 | 1.36 |
| | | | | | 1500 | 2.35 | 34.52 | 0.40 | 27.58 | 59 | 1.55 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BROWN BEAR; July 10, 1952; 1830 GCT; 50°27'N, 135°46'W; sounding, 1950 fm; wind, 360°; 20 kt; weather, cloudy; wire angle, 30-40°, 22°, missing. 140

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 11.42 | 32.38 | - | 0.92 | 0 | 11.42 | 32.38 | | 24.68 | 327 | 0.00 |
| 5 | 11.50 | 32.41 | 6.29 | 0.88 | 10 | 11.46 | 32.42 | 6.38 | 24.71 | 325 | 0.03 |
| 10 | 11.46 | 32.42 | 6.38 | 0.96 | 20 | 11.19 | 32.42 | 6.25 | 24.76 | 320 | 0.06 |
| 20 | 11.19 | 32.42 | 6.25 | 0.93 | 30 | 8.51 | 32.61 | 6.88 | 25.35 | 264 | 0.09 |
| 30 | 8.51 | 32.61 | 6.88 | 1.13 | 50 | 7.18 | 32.64 | 6.69 | 25.56 | 244 | 0.14 |
| 50 | 7.18 | 32.64 | 6.69 | 1.28 | 75 | 6.20 | 32.83 | 5.89 | 25.84 | 218 | 0.20 |
| | | | | | 100 | 5.74 | 33.09 | 5.24 | 26.10 | 193 | 0.25 |
| 90b) | 5.76 | 32.95 | 5.47 | 1.84 | 150 | 5.57 | 33.62 | 4.17 | 26.54 | 152 | 0.34 |
| 181 | 5.42 | 33.83 | 3.56 | 1.63 | 200 | 5.26 | 33.84 | 3.20 | 26.75 | 133 | 0.41 |
| 272 | 4.76 | 33.89 | 2.06 | 2.88 | 250 | 4.89 | 33.87 | 2.37 | 26.81 | 127 | 0.48 |
| 453 | 4.25 | 34.09 | 0.69 | 3.17 | 300 | 4.68 | 33.92 | 1.78 | 26.88 | 121 | 0.54 |
| 647 | 3.74 | 34.31 | 0.31 | 3.41 | 400 | 4.40 | 34.03 | 1.00 | 27.00 | 111 | 0.65 |
| | | | | | 500 | 4.11 | 34.16 | 0.57 | 27.13 | 99 | 0.76 |
| 850c) | 3.45 | 34.34 | 0.29 | 3.13 | 600 | 3.84 | 34.27 | 0.37 | 27.24 | 89 | 0.85 |
| 1348 | 2.44 | 34.47 | 0.58 | 3.38 | 700 | 3.67 | 34.32 | 0.30 | 27.30 | 84 | 0.94 |
| 1841 | 2.02 | 34.58 | 1.18 | 2.89 | 800 | 3.53 | 34.33 | 0.29 | 27.32 | 82 | 1.02 |
| | | | | | 1000 | 3.08 | 34.38 | 0.35 | 27.41 | 75 | 1.18 |
| | | | | | 1200 | 2.68 | 34.43 | 0.46 | 27.48 | 68 | 1.32 |
| | | | | | 1500 | 2.25 | 34.51 | 0.73 | 27.58 | 59 | 1.51 |

BROWN BEAR; July 12, 1952; 0126 GCT; 50°30'N, 133°15'W; sounding, 1720 fm; wind, 320°, 19 kt; weather, clear; wire angle, 20°, 11°. 141

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.13 | 32.37 | 6.10 | | 0 | 12.13 | 32.37 | 6.10 | 24.55 | 340 | 0.00 |
| 5 | 12.11 | 32.36 | 6.18 | | 10 | 12.12 | 32.34 | 6.19 | 24.52 | 342 | 0.03 |
| 10 | 12.12 | 32.34 | 6.19 | | 20 | 12.11 | 32.35 | 6.14 | 24.53 | 341 | 0.07 |
| 20 | 12.11 | 32.35 | 6.14 | | 30 | 9.48 | 32.57 | 6.68 | 25.16 | 282 | 0.10 |
| 30 | 9.48 | 32.57 | 6.68 | | 50 | 7.19 | 32.66 | 6.29 | 25.57 | 243 | 0.15 |
| 49 | 7.21 | 32.65 | 6.35 | | 75 | 6.68 | 32.85 | 4.98 | 25.79 | 222 | 0.21 |
| 98 | 6.29 | 33.03 | 4.03 | | 100 | 6.27 | 33.05 | 4.01 | 26.00 | 203 | 0.26 |
| 197 | 5.44 | 33.86 | 2.81 | | 150 | 5.79 | 33.56 | 3.43 | 26.46 | 159 | 0.35 |
| | | | | | 200 | 5.42 | 33.86 | 2.76 | 26.75 | 133 | 0.42 |
| 282c) | 5.03 | 33.98 | 1.56 | | 250 | 5.18 | 33.94 | 1.96 | 26.84 | 125 | 0.49 |
| 470 | 4.50 | 34.14 | 0.58 | | 300 | 4.91 | 33.99 | 1.44 | 26.91 | 119 | 0.55 |
| 437 | 4.48 | 34.11 | 0.73 | | 400 | 4.51 | 34.08 | 0.91 | 27.02 | 108 | 0.66 |
| 617 | 3.82 | 34.27 | 0.38 | | 500 | 4.35 | | | | | |
| 1771 | 2.08 | - | - | | 600 | 3.89 | | | | | |
| | | | | | 700 | 3.48 | | | | | |
| | | | | | 800 | 3.12 | | | | | |
| | | | | | 1000 | 2.53 | | | | | |
| | | | | | 1200 | 2.14 | | | | | |
| | | | | | 1500 | 1.92 | | | | | |

a) Third cast.
b) Second cast.
c) First cast.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| 142 | BROWN BEAR; July 12, 1952; 1424 GCT; 50°30'N, 131°45'W; sounding, 1600 fm; wind, 320°, 8 kt; weather, clear; wire angle, 14°, missing. | | | | | | | | | | |
| 0 | 13.07 | 32.04 | 5.95 | | 0 | 13.07 | 32.04 | 5.95 | 24.11 | 381 | 0.00 |
| 5 | 13.03 | 32.04 | 5.97 | | 10 | 13.38 | 32.06 | 5.92 | 24.07 | 386 | 0.04 |
| 10 | 13.38 | 32.06 | 5.92 | | 20 | 12.50 | 32.53 | 6.66 | 24.60 | 335 | 0.07 |
| 20 | 12.50 | 32.53 | 6.66 | | 30 | 8.76 | 32.55 | 6.69 | 25.26 | 272 | 0.10 |
| 30 | 8.76 | 32.55 | 6.69 | | 50 | 7.19 | 32.60 | 6.63 | 25.53 | 247 | 0.16 |
| 50 | 7.19 | 32.60 | 6.63 | | 75 | 6.71 | 32.72 | 6.15 | 25.69 | 232 | 0.22 |
| 100 | 6.32 | 32.87 | 5.69 | | 100 | 6.32 | 32.87 | 5.69 | 25.85 | 217 | 0.27 |
| 200 | 5.55 | 33.81 | 4.13 | | 150 | 5.93 | 33.44 | 5.07 | 26.35 | 170 | 0.37 |
| | | | | | 200 | 5.55 | 33.81 | 4.13 | 26.69 | 138 | 0.45 |
| 295a) | 4.85 | 33.95 | 1.47 | | 250 | 5.14 | 33.89 | 2.54 | 26.80 | 128 | 0.51 |
| 492 | 4.35 | 34.11 | 0.67 | | 300 | 4.84 | 33.95 | 1.44 | 26.88 | 121 | 0.58 |
| 739 | 3.83 | 34.31 | 0.34 | | 400 | 4.57 | 34.04 | 0.99 | 26.98 | 112 | 0.69 |
| 986 | 3.25 | 34.41 | 0.29 | | 500 | 4.33 | 34.12 | 0.66 | 27.07 | 104 | 0.80 |
| 1478 | 2.38 | 34.52 | 0.91 | | 600 | 4.13 | 34.21 | 0.49 | 27.17 | 96 | 0.90 |
| 1975 | 1.95 | 34.59 | 1.31 | | 700 | 3.92 | 34.29 | 0.37 | 27.25 | 89 | 0.99 |
| | | | | | 800 | 3.68 | 34.34 | 0.30 | 27.32 | 83 | 1.08 |
| | | | | | 1000 | 3.22 | 34.41 | 0.31 | 27.42 | 74 | 1.24 |
| | | | | | 1200 | 2.82 | 34.46 | 0.58 | 27.49 | 68 | 1.38 |
| | | | | | 1500 | 2.35 | 34.52 | 0.93 | 27.58 | 59 | 1.57 |
| 143 | BROWN BEAR; July 12, 1952; 2246 GCT; 50°30'N, 130°15'W; sounding, 1050 fm; wind, 320°, 4 kt; weather, clear; wire angle, 18°, 15°. | | | | | | | | | | |
| 0 | 13.87 | 31.87 | 5.91 | 0.48 | 0 | 13.87 | 31.87 | 5.91 | 23.82 | 409 | 0.00 |
| 5 | 13.68 | 31.87 | 5.97 | 0.42 | 10 | 13.35 | 31.89 | 6.07 | 23.94 | 398 | 0.04 |
| 10 | 13.35 | 31.89 | 6.07 | 0.42 | 20 | 11.38 | 32.48 | 6.35 | 24.77 | 319 | 0.08 |
| 20 | 11.38 | 32.48 | 6.35 | 0.72 | 30 | 9.87 | 32.56 | 6.37 | 25.09 | 288 | 0.11 |
| 30 | 9.87 | 32.56 | 6.37 | 0.89 | 50 | 7.75 | 32.64 | 6.72 | 25.48 | 252 | 0.16 |
| 50 | 7.75 | 32.64 | 6.72 | 1.05 | 75 | 7.06 | 32.76 | 6.06 | 25.67 | 234 | 0.22 |
| 99 | 6.52 | 32.90 | - | 1.50 | 100 | 6.51 | 32.91 | 5.44 | 25.86 | 216 | 0.28 |
| 198 | 5.64 | 33.83 | 3.38 | 2.33 | 150 | 6.06 | 33.49 | 4.32 | 26.38 | 168 | 0.37 |
| | | | | | 200 | 5.62 | 33.83 | 3.35 | 26.70 | 138 | 0.45 |
| 291a) | 4.86 | 33.92 | 1.96 | 2.71 | 250 | 5.17 | 33.88 | 2.52 | 26.79 | 129 | 0.52 |
| 490 | 4.06 | 34.09 | 0.77 | 3.10 | 300 | 4.81 | 33.93 | 1.89 | 26.87 | 122 | 0.58 |
| 738 | 3.65 | 34.29 | 0.29 | 3.26 | 400 | 4.37 | 34.01 | 1.22 | 26.98 | 112 | 0.70 |
| 995 | 3.24 | 34.40 | 0.27 | 3.12 | 500 | 4.04 | 34.10 | 0.74 | 27.09 | 103 | 0.80 |
| 1389 | 2.50 | 34.49 | 0.63 | 3.08 | 600 | 3.88 | 34.19 | 0.50 | 27.18 | 95 | 0.90 |
| 1788 | 2.09 | 34.60 | 1.18 | 2.76 | 700 | 3.71 | 34.27 | 0.34 | 27.26 | 88 | 0.99 |
| | | | | | 800 | 3.56 | 34.32 | 0.27 | 27.31 | 83 | 1.08 |
| | | | | | 1000 | 3.23 | 34.40 | 0.27 | 27.41 | 75 | 1.24 |
| | | | | | 1200 | 2.81 | 34.44 | 0.44 | 27.48 | 69 | 1.38 |
| | | | | | 1500 | 2.35 | 34.52 | 0.76 | 27.58 | 59 | 1.57 |
| 144 | BROWN BEAR; July 13, 1952; 0631 GCT; 50°30'N, 129°11'W; sounding, 1050 fm; wind, 200°, 3 kt; weather, fog; wire angle, 20°, 12°. | | | | | | | | | | |
| 0b) | 10.86 | 31.69 | 6.89 | | 0 | 10.86 | 31.69 | 6.89 | 24.25 | 368 | 0.00 |
| 5 | 10.71 | 31.74 | 6.97 | | 10 | 10.58 | 31.87 | 7.44 | 24.44 | 351 | 0.04 |
| 10 | 10.58 | 31.87 | 7.44 | | 20 | 9.20 | 32.15 | 5.85 | 24.88 | 308 | 0.07 |
| 20 | 9.20 | 32.15 | 5.85 | | 30 | 8.92 | 32.23 | 5.31 | 24.99 | 298 | 0.10 |
| 30 | 8.92 | 32.23 | 5.31 | | 50 | 7.94 | 32.47 | 4.91 | 25.32 | 267 | 0.16 |
| 50 | 7.94 | 32.47 | 4.91 | | 75 | 7.02 | 33.09 | 4.37 | 25.93 | 209 | 0.22 |
| 99 | 6.36 | 33.54 | 3.89 | | 100 | 6.36 | 33.55 | 3.86 | 26.38 | 166 | 0.26 |
| 198 | 6.01 | 33.94 | 2.24 | | 150 | 6.21 | 33.80 | 2.91 | 26.60 | 147 | 0.34 |
| | | | | | 200 | 6.00 | 33.94 | 2.23 | 26.74 | 134 | 0.41 |
| 282a) | 5.52 | 33.97 | 1.62 | | 250 | 5.70 | 33.96 | 1.85 | 26.79 | 130 | 0.48 |
| 472 | 4.71 | 34.13 | 0.58 | | 300 | 5.43 | 33.99 | 1.49 | 26.85 | 125 | 0.54 |
| 705 | 4.16 | 34.26 | 0.58 | | 400 | 4.98 | 34.07 | 0.86 | 26.96 | 114 | 0.66 |
| | | | | | 500 | 4.62 | 34.15 | 0.50 | 27.07 | 105 | 0.77 |
| | | | | | 600 | 4.35 | 34.21 | 0.40 | 27.14 | 99 | 0.87 |
| | | | | | 700 | 4.17 | 34.26 | 0.57 | 27.20 | 94 | 0.97 |

a) First cast.



b) Third cast.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ | |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m | |
| BROWN BEAR; July 13, 1952; 1322 GCT; 50°28'N, 128°39'W; sounding, 860 fm; wind, 320°, 1 kt; weather, fog; wire angle, missing. | | | | | | | | | | | | 145 |
| 0 | 12.70 | 31.88 | 6.41 | 0.48 | 0 | 12.70 | 31.88 | 6.41 | 24.06 | 386 | 0.00 | |
| 5 | 12.67 | 31.87 | 6.46 | 0.50 | 10 | 12.71 | 31.92 | 6.40 | 24.09 | 384 | 0.04 | |
| 10 | 12.71 | 31.92 | 6.40 | 0.54 | 20 | 11.87 | 32.37 | 6.32 | 24.59 | 336 | 0.08 | |
| 20 | 11.87 | 32.37 | 6.32 | 0.96 | 30 | 8.92 | 32.58 | 6.55 | 25.26 | 272 | 0.10 | |
| 30 | 8.92 | 32.58 | 6.55 | 1.02 | 50 | 7.21 | 32.65 | 6.56 | 25.56 | 244 | 0.16 | |
| 50 | 7.21 | 32.65 | 6.56 | 1.19 | 75 | 6.93 | 32.95 | 5.59 | 25.84 | 218 | 0.22 | |
| 100 | 6.71 | 33.22 | 4.70 | 2.00 | 100 | 6.71 | 33.22 | 4.70 | 26.08 | 196 | 0.27 | |
| 200 | 6.47 | 33.91 | 2.13 | 2.74 | 150 | 6.66 | 33.64 | 3.14 | 26.42 | 164 | 0.36 | |
| 300 | 5.67 | 33.97 | 1.81 | 2.88 | 200 | 6.47 | 33.91 | 2.13 | 26.65 | 142 | 0.43 | |
| 500 | 4.81 | 34.14 | 0.65 | 3.28 | 250 | 6.04 | 33.94 | 1.99 | 26.73 | 135 | 0.50 | |
| 750 | 4.10 | 34.32 | 0.22 | 3.40 | 300 | 5.67 | 33.97 | 1.81 | 26.80 | 129 | 0.57 | |
| 1000 | 3.64 | 34.39 | 0.24 | 3.44 | 400 | 5.21 | 34.06 | 1.14 | 26.93 | 118 | 0.69 | |
| 1200 | 3.13 | 34.47 | 0.36 | 3.44 | 500 | 4.81 | 34.14 | 0.65 | 27.04 | 108 | 0.81 | |
| 1400 | 2.90 | 34.51 | 0.46 | 3.10 | 600 | 4.50 | 34.23 | 0.43 | 27.14 | 99 | 0.91 | |
| | | | | | 700 | 4.22 | 34.29 | 0.27 | 27.22 | 92 | 1.01 | |
| | | | | | 800 | 4.02 | 34.33 | 0.21 | 27.27 | 88 | 1.10 | |
| | | | | | 1000 | 3.64 | 34.39 | 0.24 | 27.36 | 81 | 1.26 | |
| | | | | | 1200 | 3.13 | 34.47 | 0.36 | 27.47 | 70 | 1.42 | |
| BROWN BEAR; July 13, 1952; 1531 GCT; 50°29'N, 128°28'W; sounding, 113 fm; wind, 320°, 1 kt; weather, fog; wire angle, missing. | | | | | | | | | | | | 146 |
| 0 | 12.86 | 32.02 | 6.34 | 0.64 | 0 | 12.86 | 32.02 | 6.34 | 24.14 | 379 | 0.00 | |
| 5 | 12.84 | 32.04 | 6.33 | 0.61 | 10 | 12.92 | 32.13 | 6.42 | 24.21 | 372 | 0.04 | |
| 10 | 12.92 | 32.13 | 6.42 | 0.69 | 20 | 11.56 | 32.47 | 6.55 | 24.73 | 323 | 0.07 | |
| 20 | 11.56 | 32.47 | 6.55 | 0.95 | 30 | | 32.63 | 6.55 | | | | |
| 30 | - | 32.63 | 6.55 | 1.10 | 50 | 7.67 | 32.62 | 6.38 | 25.48 | 252 | | |
| 50 | 7.67 | 32.62 | 6.38 | 1.25 | 75 | 6.68 | 32.71 | 4.65 | 25.68 | 233 | | |
| 75 | 6.68 | 32.71 | 4.65 | 2.82 | 100 | 6.68 | 33.23 | 3.70 | 26.09 | 194 | | |
| 100 | 6.68 | 33.23 | 3.70 | 1.93 | 150 | 6.41 | 33.76 | 2.95 | 26.54 | 152 | | |
| 140 | 6.50 | 33.68 | 2.46 | 2.43 | | | | | | | | |
| 180 | 6.03 | 33.91 | - | 2.76 | | | | | | | | |

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm$^3$/g | dyn. m |
| BROWN BEAR; August 19, 1952; 0850 GCT;[a] 48°30'N, 124°44'W; sounding, 152 fm; wind, 270°, 6 kt; weather, clear; wire angle, 14°. | | | | | | | | | | 170 |
| 0 | 10.86 | 31.39 | 4.87 | 0 | 10.86 | 31.39 | 4.87 | 24.02 | 390 | 0.00 |
| 5 | 10.80 | 31.41 | 5.20 | 10 | 10.68 | 31.53 | 5.21 | 24.16 | 377 | 0.04 |
| 10 | 10.68 | 31.53 | 5.21 | 20 | 9.72 | 31.94 | 4.59 | 24.63 | 332 | 0.07 |
| 20 | 9.72 | 31.94 | 4.59 | 30 | 8.78 | 32.42 | 3.62 | 25.16 | 282 | 0.10 |
| 30 | 8.78 | 32.42 | 3.62 | 50 | 7.52 | 33.24 | 3.58 | 25.98 | 204 | 0.15 |
| 50 | 7.52 | 33.24 | 3.58 | 75 | 7.38 | 33.45 | 2.96 | 26.17 | 187 | 0.20 |
| 98 | 7.21 | 33.60 | 2.53 | 100 | 7.18 | 33.61 | 2.52 | 26.32 | 172 | 0.25 |
| 157 | 6.62 | 33.83 | 2.16 | 150 | 6.67 | 33.81 | 2.20 | 26.55 | 152 | 0.33 |
| 247 | 6.40 | 33.94 | 1.95 | 200 | 6.41 | 33.92 | 2.00 | 26.67 | 141 | 0.40 |
| BROWN BEAR; August 19, 1952; 1257 GCT; 48°31'N, 125°23'W; sounding, 75 fm; wind, 270°, 4 kt; weather, clear; wire angle, >03°. | | | | | | | | | | 171 |
| 0 | 13.79 | 32.39 | 7.68 | 0 | 13.79 | 32.39 | 7.68 | 24.24 | 369 | 0.00 |
| 5 | 13.72 | 32.37 | 7.65 | 10 | 10.69 | 32.56 | 6.45 | 24.95 | 301 | 0.03 |
| 10 | 10.69 | 32.56 | 6.45 | 20 | 8.68 | 32.96 | 3.62 | 25.59 | 241 | 0.06 |
| 20 | 8.68 | 32.96 | 3.62 | 30 | 7.62 | 33.24 | 2.63 | 25.97 | 205 | 0.08 |
| 30 | 7.62 | 33.24 | 2.63 | 50 | 6.78 | 33.64 | 2.34 | 26.40 | 164 | 0.12 |
| 50 | 6.78 | 33.64 | 2.34 | 75 | 6.52 | 33.73 | 2.08 | 26.50 | 155 | 0.16 |
| 75 | 6.52 | 33.73 | 2.08 | 100 | 6.36 | 33.87 | 2.16 | 26.64 | 143 | 0.20 |
| 100 | 6.36 | 33.87 | 2.16 | | | | | | | |
| 130 | 6.33 | 33.87 | 1.94 | | | | | | | |
| BROWN BEAR; August 19, 1952; 1712 GCT; 48°32'N, 125°58'W; sounding, 72 fm; wind, 220°, 4 kt; weather, clear; wire angle, 08°. | | | | | | | | | | 172 |
| 0 | 15.40 | 32.16 | 7.11 | 0 | 15.40 | 32.16 | 7.11 | 23.72 | 419 | 0.00 |
| 5 | 12.84 | 32.40 | 7.64 | 10 | 12.28 | 32.44 | 7.67 | 24.57 | 338 | 0.04 |
| 10 | 12.28 | 32.44 | 7.67 | 20 | 8.99 | 32.59 | 5.88 | 25.26 | 273 | 0.07 |
| 20 | 8.99 | 32.59 | 5.88 | 30 | 8.18 | 32.64 | 5.82 | 25.42 | 257 | 0.10 |
| 30 | 8.18 | 32.64 | 5.82 | 50 | 7.75 | 32.88 | 4.29 | 25.67 | 234 | 0.14 |
| 50 | 7.75 | 32.88 | 4.29 | 75 | 7.28 | 33.29 | 4.05 | 26.06 | 197 | 0.20 |
| 75 | 7.28 | 33.29 | 4.05 | 100 | 7.10 | 33.66 | 3.08 | 26.37 | 168 | 0.24 |
| 100 | 7.10 | 33.66 | 3.08 | | | | | | | |
| 120 | 6.83 | 33.82 | 2.71 | | | | | | | |
| BROWN BEAR; August 19, 1952; 2228 GCT; 48°33'N, 126°47'W; sounding, 1120 fm; wind, 220°, 8 kt; weather, clear; wire angle, 07°, 00°. | | | | | | | | | | 173 |
| 0 | 16.00 | 32.47 | 6.10 | 0 | 16.00 | 32.47 | 6.10 | 23.83 | 409 | 0.00 |
| 5 | 15.41 | 32.47 | 6.07 | 10 | 14.45 | 32.46 | 6.26 | 24.15 | 378 | 0.04 |
| 10 | 14.45 | 32.46 | 6.26 | 20 | 13.42 | 32.47 | 6.44 | 24.37 | 357 | 0.08 |
| 20 | 13.42 | 32.47 | 6.44 | 30 | 12.49 | 32.52 | 7.00 | 24.59 | 336 | 0.11 |
| 30 | 12.49 | 32.52 | 7.00 | 50 | 8.07 | 32.61 | 6.70 | 25.41 | 258 | 0.17 |
| 50 | 8.07 | 32.61 | 6.70 | 75 | 7.66 | 32.74 | 6.24 | 25.57 | 243 | 0.23 |
| 100 | 7.32 | 32.91 | 5.71 | 100 | 7.32 | 32.91 | 5.71 | 25.75 | 226 | 0.29 |
| 199 | 6.66 | 33.92 | 2.83 | 150 | 6.98 | 33.48 | 4.12 | 26.25 | 180 | 0.39 |
| | | | | 200 | 6.65 | 33.92 | 2.82 | 26.64 | 144 | 0.48 |
| 496b) | 4.88 | 34.13 | 0.66 | 250 | 6.28 | 33.96 | 2.32 | 26.72 | 137 | 0.54 |
| 745 | 4.14 | 34.30 | 0.35 | 300 | 5.95 | 33.99 | 1.87 | 26.78 | 131 | 0.61 |
| 994 | 3.56 | 34.39 | 0.30 | 400 | 5.35 | 34.06 | 1.15 | 26.91 | 120 | 0.74 |
| 1492 | 2.52 | 34.53 | 0.72 | 500 | 4.87 | 34.13 | 0.65 | 27.02 | 110 | 0.85 |
| 1992 | 1.92 | 34.62 | 1.55 | 600 | 4.55 | 34.21 | 0.49 | 27.12 | 101 | 0.96 |
| | | | | 700 | 4.26 | 34.28 | 0.38 | 27.21 | 94 | 1.05 |
| | | | | 800 | 4.01 | 34.32 | 0.32 | 27.27 | 88 | 1.14 |
| | | | | 1000 | 3.54 | 34.39 | 0.30 | 27.37 | 80 | 1.31 |
| | | | | 1200 | 3.08 | 34.45 | 0.43 | 27.46 | 71 | 1.46 |
| | | | | 1500 | 2.51 | 34.53 | 0.73 | 27.58 | 60 | 1.66 |

a) Times reported are those of the messenger release of the first cast.
b) First cast.

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ $10^{-5}$ $cm^3/g$ | $\Delta D$ dyn. m |
| 174 | BROWN BEAR; August 20, 1952; 0805 GCT; 48°33'N, 128°14'W; sounding, 1290 fm; wind, 270°, 6 kt; weather, cloudy; wire angle, 09°, 05°. | | | | | | | | | |
| 0 | 15.39 | 32.48 | | 0 | 15.39 | 32.48 | | 23.97 | 395 | 0.00 |
| 5 | 14.59 | 32.54 | | 10 | 14.43 | 32.54 | | 24.22 | 371 | 0.04 |
| 10 | 14.43 | 32.54 | | 20 | 14.07 | 32.55 | | 24.30 | 364 | 0.08 |
| 20 | 14.07 | 32.55 | | 30 | | 32.56 | | | | |
| 30 | - | 32.56 | | 50 | | 32.53 | | | | |
| 50 | - | 32.53 | | 75 | | 32.67 | | | | |
| 100 | 7.26 | 32.84 | | 100 | 7.26 | 32.84 | | 25.71 | 231 | |
| 199 | 6.34 | 33.87 | | 150 | 6.78 | 33.48 | | 26.27 | 178 | |
| 298 | 5.58 | 33.97 | | 200 | 6.33 | 33.87 | | 26.64 | 144 | |
| | | | | 250 | 5.93 | 33.92 | | 26.73 | 135 | |
| 495a) | 4.56 | 34.09 | | 300 | 5.57 | 33.97 | | 26.81 | 128 | |
| 748 | - | 34.29 | | 400 | 5.01 | 34.03 | | 26.93 | 118 | |
| 998 | 3.31 | 34.42 | | 500 | 4.55 | 34.09 | | 27.03 | 109 | |
| 1498 | 2.46 | 34.52 | | 600 | 4.27 | 34.18 | | 27.13 | 100 | |
| 1998 | 1.92 | 34.60 | | 700 | 4.00 | 34.26 | | 27.22 | 92 | |
| | | | | 800 | 3.75 | 34.32 | | 27.29 | 86 | |
| | | | | 1000 | 3.31 | 34.42 | | 27.42 | 75 | |
| | | | | 1200 | 2.93 | 34.46 | | 27.48 | 69 | |
| | | | | 1500 | 2.46 | 34.52 | | 27.57 | 61 | |
| 175 | BROWN BEAR; August 20, 1952; 1411 GCT; 48°27'N, 128°58'W; sounding, 1350 fm; wind, 220°, 8 kt; weather, clear; wire angle, 08°, 07°. | | | | | | | | | |
| 0 | 15.32 | 32.47 | 6.12 | 0 | 15.32 | 32.47 | 6.12 | 23.98 | 394 | 0.00 |
| 5 | - | 32.43 | 6.15 | 10 | 14.16 | 32.41 | 6.18 | 24.18 | 375 | 0.04 |
| 10 | 14.16 | 32.41 | 6.18 | 20 | 13.62 | 32.40 | 6.18 | 24.28 | 366 | 0.08 |
| 20 | 13.62 | 32.40 | 6.18 | 30 | 10.78 | 32.51 | 6.40 | 24.90 | 307 | 0.11 |
| 30 | 10.78 | 32.51 | 6.40 | 50 | 7.75 | 32.63 | 6.66 | 25.47 | 252 | 0.16 |
| 50 | 7.75 | 32.63 | 6.66 | 75 | 7.31 | 32.80 | 6.00 | 25.67 | 234 | 0.23 |
| 99 | 6.95 | 32.98 | 5.39 | 100 | 6.94 | 32.99 | 5.35 | 25.87 | 216 | 0.28 |
| 199 | 6.22 | 33.90 | 2.90 | 150 | 6.57 | 33.56 | 3.94 | 26.36 | 169 | 0.38 |
| 298 | 5.59 | 33.96 | 1.86 | 200 | 6.21 | 33.90 | 2.89 | 26.68 | 140 | 0.46 |
| | | | | 250 | 5.88 | 33.93 | 2.33 | 26.74 | 134 | 0.52 |
| 500a) | 4.70 | 34.12 | 0.72 | 300 | 5.58 | 33.96 | 1.85 | 26.81 | 129 | 0.59 |
| 750 | 4.01 | 34.27 | 0.40 | 400 | 5.10 | 34.05 | 1.19 | 26.93 | 117 | 0.71 |
| 1000 | 3.32 | 34.41 | 0.32 | 500 | 4.70 | 34.12 | 0.72 | 27.03 | 109 | 0.82 |
| 1500 | 2.40 | 34.55 | 0.78 | 600 | 4.42 | 34.18 | 0.56 | 27.11 | 102 | 0.93 |
| 2000 | 1.93 | 34.60 | 1.46 | 700 | 4.15 | 34.24 | 0.45 | 27.19 | 95 | 1.03 |
| | | | | 800 | 3.86 | 34.30 | 0.37 | 27.27 | 88 | 1.12 |
| | | | | 1000 | 3.32 | 34.41 | 0.32 | 27.41 | 76 | 1.28 |
| | | | | 1200 | 2.90 | 34.48 | 0.48 | 27.50 | 67 | 1.43 |
| | | | | 1500 | 2.40 | 34.55 | 0.78 | 27.60 | 58 | 1.61 |
| | | | | 2000 | 1.93 | 34.60 | 1.46 | 27.68 | 51 | 1.88 |

a) First cast.

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ $10^{-5}$ $cm^3/g$ | $\Delta D$ dyn. m |
| BROWN BEAR; August 20, 1952; 2028 GCT; 48°33'N, 130°04'W; sounding, 1520 fm; wind, 220°, 6 kt; weather, cloudy; wire angle, 08°, 00°. | | | | | | | | | | 176 |
| 0 | 15.69 | 32.50 | | 0 | 15.69 | 32.50 | | 23.92 | 400 | 0.00 |
| 5 | - | 32.50 | | 10 | 15.40 | 32.49 | | 23.97 | 395 | 0.04 |
| 10 | 15.40 | 32.49 | | 20 | 14.78 | 32.51 | | 24.12 | 381 | 0.08 |
| 20 | 14.78 | 32.51 | | 30 | 14.68 | 32.49 | | 24.13 | 380 | 0.12 |
| 30 | 14.68 | 32.49 | | 50 | 9.80 | 32.59 | | 25.13 | 286 | 0.18 |
| 50 | 9.80 | 32.59 | | 75 | 8.25 | 32.59 | | 25.37 | 263 | 0.25 |
| 100 | 7.11 | 32.68 | | 100 | 7.11 | 32.68 | | 25.60 | 241 | 0.32 |
| 200 | 6.63 | 33.82 | | 150 | 6.97 | 33.38 | | 26.17 | 188 | 0.42 |
| 300 | 5.38 | 33.89 | | 200 | 6.63 | 33.82 | | 26.56 | 151 | 0.51 |
| | | | | 250 | 5.94 | 33.85 | | 26.67 | 141 | 0.58 |
| 500a) | 4.47 | 34.09 | | 300 | 5.38 | 33.89 | | 26.77 | 132 | 0.65 |
| 682 | 3.89 | 34.21 | | 400 | 4.89 | 34.00 | | 26.92 | 119 | 0.77 |
| 1194 | 2.98 | 34.45 | | 500 | 4.47 | 34.09 | | 27.04 | 108 | 0.89 |
| 1518 | 2.42 | 34.50 | | 600 | 4.13 | 34.16 | | 27.13 | 100 | 0.99 |
| | | | | 700 | 3.86 | 34.22 | | 27.20 | 93 | 1.09 |
| | | | | 800 | 3.68 | 34.28 | | 27.27 | 88 | 1.18 |
| | | | | 1000 | 3.32 | 34.38 | | 27.38 | 78 | 1.34 |
| | | | | 1200 | 2.97 | 34.45 | | 27.47 | 70 | 1.49 |
| | | | | 1500 | 2.45 | 34.50 | | 27.56 | 62 | 1.69 |
| BROWN BEAR; August 21, 1952; 0234 GCT; 48°34'N, 130°48'W; sounding, 1500 fm; wind, 320°, 2 kt; weather, cloudy; wire angle, 17°, 15°. | | | | | | | | | | 177 |
| 0 | 15.68 | 32.44 | 5.99 | 0 | 15.68 | 32.44 | 5.99 | 23.87 | 404 | 0.00 |
| 5 | 15.41 | 32.45 | 6.03 | 10 | 15.13 | 32.44 | 6.06 | 23.99 | 393 | 0.04 |
| 10 | 15.13 | 32.44 | 6.06 | 20 | 14.72 | 32.46 | 6.07 | 24.10 | 383 | 0.08 |
| 20 | 14.72 | 32.46 | 6.07 | 30 | 14.54 | 32.44 | 6.18 | 24.12 | 381 | 0.12 |
| 30 | 14.54 | 32.44 | 6.18 | 50 | 8.85 | 32.69 | 6.23 | 25.36 | 264 | 0.18 |
| 50 | 8.85 | 32.69 | 6.23 | 75 | 7.79 | 32.69 | 6.31 | 25.51 | 249 | 0.24 |
| 98 | 7.03 | 32.76 | 6.23 | 100 | 7.01 | 32.79 | 6.18 | 25.70 | 231 | 0.30 |
| 200 | 6.19 | 33.84 | 4.09 | 150 | 6.61 | 33.44 | 5.05 | 26.26 | 178 | 0.41 |
| 300 | 5.27 | 33.90 | 2.64 | 200 | 6.19 | 33.84 | 4.09 | 26.63 | 144 | 0.49 |
| | | | | 250 | 5.69 | 33.87 | 3.32 | 26.72 | 136 | 0.56 |
| 486a) | 4.43 | 34.05 | 0.97 | 300 | 5.27 | 33.90 | 2.64 | 26.79 | 130 | 0.62 |
| 734 | 3.91 | 34.25 | 0.37 | 400 | 4.77 | 33.98 | 1.61 | 26.92 | 119 | 0.75 |
| 983 | 3.38 | 34.36 | 0.30 | 500 | 4.40 | 34.06 | 0.93 | 27.02 | 110 | 0.86 |
| 1483 | 2.42 | 34.50 | 0.66 | 600 | 4.19 | 34.15 | 0.63 | 27.11 | 101 | 0.97 |
| 1971 | 1.95 | 34.59 | 1.43 | 700 | 3.98 | 34.23 | 0.43 | 27.20 | 94 | 1.07 |
| | | | | 800 | 3.77 | 34.28 | 0.34 | 27.26 | 89 | 1.16 |
| | | | | 1000 | 3.34 | 34.37 | 0.30 | 27.37 | 79 | 1.32 |
| | | | | 1200 | 2.90 | 34.43 | 0.40 | 27.46 | 71 | 1.47 |
| | | | | 1500 | 2.40 | 34.50 | 0.68 | 27.56 | 61 | 1.67 |
| BROWN BEAR; August 21, 1952; 0849 GCT; 48°35'N, 131°34'W; sounding, 1680 fm; wind, 220°, 9 kt; weather, cloudy; wire angle, 21°, 15°. | | | | | | | | | | 178 |
| 0 | 15.58 | 32.59 | 5.92 | 0 | 15.58 | 32.59 | 5.92 | 24.01 | 391 | 0.00 |
| 5 | 15.58 | 32.59 | 6.06 | 10 | 15.56 | 32.59 | 6.05 | 24.02 | 391 | 0.04 |
| 10 | 15.56 | 32.59 | 6.05 | 20 | 15.01 | 32.65 | 5.97 | 24.18 | 375 | 0.08 |
| 19 | 14.98 | 32.65 | 5.99 | 30 | 13.93 | 32.66 | 6.05 | 24.42 | 353 | 0.11 |
| 28 | 14.65 | 32.66 | 5.92 | 50 | 8.63 | 32.65 | 6.88 | 25.36 | 263 | 0.18 |
| 48 | 8.74 | 32.66 | 6.88 | 75 | 7.39 | 32.63 | 6.78 | 25.52 | 248 | 0.24 |
| 98 | 6.53 | 32.69 | 6.59 | 100 | 6.52 | 32.72 | 6.55 | 25.71 | 230 | 0.30 |
| 196 | 5.92 | 33.80 | 4.82 | 150 | 6.23 | 33.41 | 5.72 | 26.29 | 176 | 0.40 |
| 295 | 5.09 | 33.88 | 2.43 | 200 | 5.88 | 33.80 | 4.69 | 26.64 | 143 | 0.48 |
| | | | | 250 | 5.43 | 33.84 | 3.37 | 26.73 | 135 | 0.55 |
| 473a) | 4.28 | 34.05 | 1.06 | 300 | 5.06 | 33.89 | 2.39 | 26.81 | 128 | 0.62 |
| 711 | - | 34.22 | 0.35 | 400 | 4.58 | 33.98 | 1.53 | 26.94 | 117 | 0.74 |
| 950 | 3.28 | - | 0.29 | 500 | 4.22 | 34.07 | 0.95 | 27.05 | 107 | 0.85 |
| 1438 | 2.46 | 34.51 | 0.60 | 600 | 3.99 | 34.15 | 0.60 | 27.13 | 99 | 0.95 |
| 1932 | 1.99 | 34.59 | 1.22 | 700 | 3.78 | 34.21 | 0.37 | 27.20 | 93 | 1.05 |
| | | | | 800 | 3.57 | 34.27 | 0.31 | 27.27 | 87 | 1.14 |
| | | | | 1000 | 3.18 | 34.36 | 0.31 | 27.38 | 78 | 1.30 |
| | | | | 1200 | 2.82 | 34.44 | 0.41 | 27.48 | 69 | 1.45 |
| | | | | 1500 | 2.38 | 34.53 | 0.66 | 27.59 | 59 | 1.64 |

a) First cast.

UW

BB-9

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm$^3$/g | dyn. m |
| 179 | BROWN BEAR; August 21, 1952; 1451 GCT; 48°35'N, 132°24'W; sounding, 1700 fm; wind, 220°, 10 kt; weather, cloudy; wire angle, 12°, 11°. | | | | | | | | | |
| 0 | 15.28 | 32.55 | 5.66 | 0 | 15.28 | 32.55 | 5.66 | 24.05 | 388 | 0.00 |
| 5 | 15.22 | 32.55 | 5.62 | 10 | 15.26 | 32.56 | 5.81 | 24.06 | 387 | 0.04 |
| 10 | 15.26 | 32.56 | 5.81 | 20 | 14.92 | 32.52 | 5.62 | 24.10 | 383 | 0.08 |
| 20 | 14.92 | 32.52 | 5.62 | 30 | 14.24 | 32.54 | 5.71 | 24.26 | 368 | 0.12 |
| 30 | 14.24 | 32.54 | 5.71 | 50 | 7.76 | 32.67 | 6.60 | 25.50 | 250 | 0.18 |
| 49 | 7.80 | 32.67 | 6.66 | 75 | 6.94 | 32.69 | 5.11 | 25.63 | 238 | 0.24 |
| 98 | 6.36 | 32.77 | 4.09 | 100 | 6.35 | 32.80 | 4.08 | 25.79 | 222 | 0.30 |
| 196 | 5.82 | 33.87 | 3.43 | 150 | 6.12 | 33.49 | 3.77 | 26.37 | 169 | 0.39 |
| 295 | 4.90 | 33.89 | 2.42 | 200 | 5.78 | 33.87 | 3.38 | 26.71 | 137 | 0.47 |
| | | | | 250 | 5.27 | 33.87 | 2.86 | 26.77 | 131 | 0.54 |
| 493 | 4.14 | 34.09 | 0.97 | 300 | 4.88 | 33.90 | 2.37 | 26.84 | 125 | 0.60 |
| 740 | - | 34.25 | 0.44 | 400 | 4.47 | 34.00 | 1.55 | 26.96 | 114 | 0.72 |
| 988 | 3.16 | 34.36 | 0.35 | 500 | 4.12 | 34.10 | 0.95 | 27.08 | 104 | 0.83 |
| 1486 | 2.44 | 34.50 | 0.56 | 600 | 3.91 | 34.17 | 0.68 | 27.16 | 97 | 0.93 |
| 1985 | 1.99 | 34.60 | 0.48 | 700 | 3.70 | 34.23 | 0.49 | 27.23 | 91 | 1.02 |
| | | | | 800 | 3.50 | 34.28 | 0.40 | 27.29 | 86 | 1.11 |
| | | | | 1000 | 3.14 | 34.36 | 0.36 | 27.38 | 77 | 1.27 |
| | | | | 1200 | 2.82 | 34.42 | 0.47 | 27.46 | 70 | 1.42 |
| | | | | 1500 | 2.42 | 34.50 | 0.56 | 27.56 | 62 | 1.62 |
| 180 | BROWN BEAR; August 21, 1952; 2104 GCT; 48°37'N, 133°15'W; sounding, 900 fm; wind, 180°, 26 kt; weather, cloudy; wire angle, 23°, 21°. | | | | | | | | | |
| 0 | 15.28 | 32.61 | 5.95 | 0 | 15.28 | 32.61 | 5.95 | 24.09 | 383 | 0.00 |
| 5 | 15.26 | 32.65 | 5.99 | 10 | 15.31 | 32.64 | 6.05 | 24.11 | 382 | 0.04 |
| 9 | 15.31 | 32.64 | 6.06 | 20 | 15.19 | 32.63 | 6.13 | 24.13 | 380 | 0.08 |
| 18 | 15.22 | 32.64 | 6.03 | 30 | 14.63 | 32.62 | 6.60 | 24.24 | 370 | 0.11 |
| 28 | 14.98 | 32.62 | - | 50 | 11.48 | 32.64 | 7.11 | 24.88 | 310 | 0.18 |
| 46 | - | 32.64 | 7.11 | 75 | 8.32 | 32.63 | 7.06 | 25.39 | 261 | 0.25 |
| 94 | 6.50 | 32.65 | 6.96 | 100 | 6.38 | 32.68 | 6.78 | 25.70 | 232 | 0.32 |
| 192 | 5.12 | - | - | 150 | 5.54 | 32.96 | 5.41 | 26.02 | 201 | 0.42 |
| 288 | 5.13 | 33.82 | 3.09 | 200 | 5.15 | 33.26 | 4.32 | 26.30 | 175 | 0.52 |
| | | | | 250 | 5.23 | 33.57 | 3.52 | 26.54 | 153 | 0.60 |
| 322a) | 4.92 | 34.05 | 2.84 | 300 | 5.05 | 33.91 | 3.00 | 26.83 | 126 | 0.67 |
| 552 | 4.32 | 34.27 | 0.66 | 400 | 4.71 | 34.14 | 1.95 | 27.05 | 106 | 0.78 |
| 1008 | 3.19 | 34.43 | 0.29 | 500 | 4.45 | 34.23 | 1.04 | 27.15 | 98 | 0.89 |
| 1480 | 2.37 | 34.48 | 0.72 | 600 | 4.19 | 34.29 | 0.58 | 27.22 | 91 | 0.98 |
| | | | | 700 | 3.92 | 34.33 | 0.46 | 27.28 | 86 | 1.07 |
| | | | | 800 | 3.66 | 34.37 | 0.37 | 27.34 | 81 | 1.15 |
| | | | | 1000 | 3.21 | 34.43 | 0.29 | 27.43 | 73 | 1.31 |
| | | | | 1200 | 2.81 | 34.46 | 0.37 | 27.49 | 67 | 1.45 |
| 181 | BROWN BEAR; August 23, 1952; 1444 GCT; 47°37'N, 136°15'W; sounding, 2180 fm; wind, 220°, 22 kt; weather, intermittent slight rain; wire angle, 25°, 18°. | | | | | | | | | |
| 0 | 14.93 | 32.61 | 6.05 | 0 | 14.93 | 32.61 | 6.05 | 24.17 | 376 | 0.00 |
| 5 | 13.84 | 32.62 | 6.00 | 10 | 14.90 | 32.62 | 6.01 | 24.18 | 375 | 0.04 |
| 10 | 14.90 | 32.62 | 6.01 | 20 | 14.82 | 32.61 | 6.17 | 24.19 | 374 | 0.08 |
| 19 | 14.83 | 32.61 | 6.17 | 30 | 14.73 | 32.63 | 6.14 | 24.23 | 371 | 0.11 |
| 28 | 14.78 | 32.62 | 6.16 | 50 | 14.21 | 32.70 | 5.87 | 24.39 | 356 | 0.18 |
| | | | | 75 | 13.58 | 32.79 | 5.56 | 24.59 | 338 | 0.27 |
| 734a) | 3.53 | 34.27 | 0.56 | 100 | 12.97 | 32.88 | 5.24 | 24.78 | 320 | 0.35 |
| 982 | 3.02 | 34.38 | 0.40 | 150 | 11.80 | 33.05 | 4.65 | 25.13 | 287 | 0.51 |
| 1488 | 2.36 | 34.50 | 0.60 | 200 | 10.70 | 33.20 | 4.09 | 25.45 | 258 | 0.64 |
| 1988 | - | 34.60 | 1.32 | 250 | 9.68 | 33.35 | 3.57 | 25.74 | 231 | 0.76 |
| | | | | 300 | 8.73 | 33.49 | 3.10 | 26.00 | 207 | 0.87 |
| | | | | 400 | 7.04 | 33.74 | 2.26 | 26.44 | 165 | 1.06 |
| | | | | 500 | 5.65 | 33.94 | 1.57 | 26.78 | 134 | 1.21 |
| | | | | 600 | 4.55 | 34.11 | 1.04 | 27.04 | 109 | 1.33 |
| | | | | 700 | 3.74 | 34.24 | 0.65 | 27.23 | 91 | 1.43 |
| | | | | 800 | 3.38 | 34.30 | 0.50 | 27.31 | 83 | 1.52 |
| | | | | 1000 | | 34.38 | 0.40 | | | |
| | | | | 1200 | | 34.43 | 0.43 | | | |
| 610 | | | | 1500 | | 34.50 | 0.62 | | | |

a) First cast.

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ $10^{-5}$ $cm^3/g$ | $\Delta D$ dyn. m |
| BROWN BEAR; August 25, 1952; 2311 GCT; 46°52'N, 128°27'W; sounding, 1460 fm; wind, 290°, 16 kt; weather, cloudy; wire angle, 14°, 12°. | | | | | | | | | | 182 |
| 0 | - | 32.52 | 5.88 | 0 | | 32.52 | 5.88 | | | |
| 5 | 15.43 | 32.51 | 5.94 | 10 | 15.44 | 32.50 | 5.95 | 23.97 | 395 | |
| 10 | 15.44 | 32.50 | 5.95 | 20 | 15.38 | 32.50 | 5.92 | 23.99 | 394 | |
| 20 | 15.38 | 32.50 | 5.92 | 30 | 13.41 | 32.57 | 7.06 | 24.45 | 350 | |
| 30 | 13.41 | 32.57 | 7.06 | 50 | 8.67 | 32.62 | 6.50 | 25.33 | 266 | |
| 49 | 8.69 | 32.61 | 6.53 | 75 | 8.23 | 32.82 | 5.76 | 25.55 | 245 | |
| 100 | - | 33.03 | 5.10 | 100 | | 33.03 | 5.10 | | | |
| 200 | 6.56 | 33.85 | 3.15 | 150 | 7.12 | 33.53 | 4.00 | 26.27 | 178 | |
| 299 | 5.88 | 33.98 | 2.16 | 200 | 6.56 | 33.85 | 3.15 | 26.59 | 148 | |
| | | | | 250 | 6.20 | 33.92 | 2.61 | 26.70 | 139 | |
| 494a) | - | 34.07 | 1.04 | 300 | 5.87 | 33.98 | 2.15 | 26.79 | 131 | |
| 742 | 4.12 | 34.29 | 0.39 | 400 | 5.39 | 34.02 | 1.51 | 26.88 | 123 | |
| 990 | 3.56 | 34.40 | 0.30 | 500 | 4.96 | 34.08 | 1.02 | 26.97 | 115 | |
| 1487 | 2.48 | 34.53 | 0.85 | 600 | 4.58 | 34.18 | 0.69 | 27.09 | 104 | |
| 1985 | 1.95 | 34.57 | 1.50 | 700 | 4.25 | 34.26 | 0.46 | 27.19 | 95 | |
| | | | | 800 | 3.99 | 34.32 | 0.35 | 27.27 | 88 | |
| | | | | 1000 | 3.53 | 34.40 | 0.31 | 27.38 | 79 | |
| | | | | 1200 | 3.04 | 34.47 | 0.53 | 27.48 | 69 | |
| | | | | 1500 | 2.46 | 34.53 | 0.86 | 27.58 | 60 | |
| BROWN BEAR; August 26, 1952; 1213 GCT; 46°44'N, 130°29'W; sounding, 1520 fm; wind, 290°, 14 kt; weather, cloudy; wire angle, 18°, 12°. | | | | | | | | | | 183 |
| 0 | 15.26 | 32.66 | 6.00 | 0 | 15.26 | 32.66 | 6.00 | 24.13 | 379 | 0.00 |
| 5 | 15.21 | 32.65 | 6.00 | 10 | 15.22 | 32.66 | 6.05 | 24.14 | 378 | 0.04 |
| 10 | 15.22 | 32.66 | 6.05 | 20 | 15.19 | 32.65 | 6.04 | 24.14 | 379 | 0.08 |
| 20 | 15.19 | 32.65 | 6.04 | 30 | 15.16 | 32.65 | 6.09 | 24.15 | 379 | 0.11 |
| 30 | 15.16 | 32.65 | 6.09 | 50 | | 32.74 | 6.22 | | | |
| 50 | - | 32.74 | 6.22 | 75 | 9.57 | 32.75 | 6.55 | 25.29 | 270 | |
| 100 | 7.50 | 32.82 | 6.61 | 100 | 7.50 | 32.82 | 6.61 | 25.66 | 236 | |
| 200 | 6.58 | 33.81 | 4.16 | 150 | 7.08 | 33.43 | 5.23 | 26.19 | 185 | |
| 300 | 5.34 | 33.90 | 2.88 | 200 | 6.58 | 33.81 | 4.16 | 26.56 | 151 | |
| 483 | 4.34 | 34.02 | 1.24 | 250 | 5.90 | 33.86 | 3.48 | 26.69 | 140 | |
| | | | | 300 | 5.34 | 33.90 | 2.88 | 26.79 | 130 | |
| 726a) | - | 34.25 | 0.35 | 400 | 4.75 | 33.96 | 1.88 | 26.90 | 120 | |
| 968 | 3.42 | 34.40 | 0.30 | 500 | 4.31 | 34.04 | 1.15 | 27.01 | 110 | |
| 1463 | 2.59 | 34.52 | 0.76 | 600 | 4.11 | 34.14 | 0.71 | 27.11 | 101 | |
| 1962 | 1.96 | 34.59 | 1.42 | 700 | 3.92 | 34.23 | 0.40 | 27.20 | 93 | |
| | | | | 800 | 3.73 | 34.30 | 0.31 | 27.28 | 87 | |
| | | | | 1000 | 3.36 | 34.41 | 0.32 | 27.40 | 76 | |
| | | | | 1200 | 3.01 | 34.46 | 0.49 | 27.48 | 70 | |
| | | | | 1500 | 2.54 | 34.53 | 0.81 | 27.57 | 61 | |
| BROWN BEAR; August 27, 1952; 2300 GCT; 46°46'N, 130°46'W; sounding, 44 fm; wind, 200°, 11 kt; weather, cloudy; wire angle, 12°. | | | | | | | | | | 184 |
| 0 | 15.53 | 32.74 | 5.71 | 0 | 15.53 | 32.74 | 5.71 | 24.14 | 379 | 0.00 |
| 5 | 15.47 | 32.71 | 5.85 | 10 | 15.35 | 32.72 | 5.91 | 24.16 | 377 | 0.04 |
| 10 | 15.35 | 32.72 | 5.91 | 20 | 15.13 | 32.71 | 5.90 | 24.20 | 373 | 0.08 |
| 20 | 15.13 | 32.71 | 5.90 | 30 | 15.11 | 32.69 | 5.92 | 24.19 | 375 | 0.11 |
| 30 | 15.11 | 32.69 | 5.92 | 50 | 8.27 | 32.80 | 6.59 | 25.53 | 247 | 0.18 |
| 40 | 14.93 | 32.69 | 5.85 | | | | | | | |
| 49 | 8.72 | 32.79 | 6.54 | | | | | | | |
| 68 | 8.21 | 32.80 | 6.44 | | | | | | | |

a) First cast.

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | m | °C | ‰ | ml/L | g/L | $10^{-5}$ $cm^3/g$ | dyn. m |
| 185 | BROWN BEAR; August 28, 1952; 0243 GCT; 46°47'N, 130°44'W; sounding, 100 fm; wind, 180°, 3 kt; weather, cloudy; wire angle, 12°. | | | | | | | | | |
| 0 | 15.45 | 32.68 | | 0 | 15.45 | 32.68 | | 24.11 | 382 | 0.00 |
| 5 | 15.46 | 32.68 | | 10 | 15.34 | 32.68 | | 24.13 | 380 | 0.04 |
| 10 | 15.34 | 32.68 | | 20 | 15.13 | 32.68 | | 24.18 | 376 | 0.08 |
| 20 | 15.13 | 32.68 | | 30 | 14.67 | 32.68 | | 24.28 | 366 | 0.11 |
| 40 | 13.40 | 32.70 | | 50 | 10.34 | 32.78 | | 25.18 | 280 | 0.18 |
| 60 | 8.44 | 32.83 | | 75 | 8.08 | 32.84 | | 25.59 | 242 | 0.24 |
| 79 | 7.99 | 32.84 | | 100 | 7.47 | 32.88 | | 25.71 | 231 | 0.30 |
| 98 | - | 32.85 | | 150 | 6.91 | 33.43 | | 26.22 | 183 | 0.40 |
| 118 | 7.16 | 33.11 | | | | | | | | |
| 148 | 6.93 | 33.41 | | | | | | | | |
| 178 | 6.68 | 33.62 | | | | | | | | |
| 186 | BROWN BEAR; August 28, 1952; 0404 GCT; 46°49'N, 130°42'W; sounding, 500 fm; wind, 180°, 3 kt; weather, cloudy; wire angle, 00°. | | | | | | | | | |
| 0 | 15.49 | 32.66 | | 0 | 15.49 | 32.66 | | 24.08 | 384 | 0.00 |
| 10 | 15.39 | 32.68 | | 10 | 15.39 | 32.68 | | 24.12 | 381 | 0.04 |
| 20 | 15.16 | 32.68 | | 20 | 15.16 | 32.68 | | 24.17 | 376 | 0.08 |
| 30 | 15.08 | 32.67 | | 30 | 15.08 | 32.67 | | 24.18 | 375 | 0.11 |
| 50 | 10.18 | 32.70 | | 50 | 10.18 | 32.70 | | 25.15 | 283 | 0.18 |
| 75 | 7.89 | 32.75 | | 75 | 7.89 | 32.75 | | 25.55 | 246 | 0.25 |
| 100 | 7.54 | 32.81 | | 100 | 7.54 | 32.81 | | 25.64 | 237 | 0.31 |
| 149 | 6.88 | 33.47 | | 150 | 6.87 | 33.48 | | 26.26 | 179 | 0.41 |
| 199 | 6.37 | 33.77 | | 200 | 6.36 | 33.77 | | 26.56 | 151 | 0.49 |
| 298 | 5.38 | 33.87 | | 250 | 5.81 | 33.82 | | 26.67 | 141 | 0.57 |
| 448 | 4.58 | 34.01 | | 300 | 5.37 | 33.87 | | 26.76 | 133 | 0.64 |
| 898 | 3.60 | 34.33 | | 400 | 4.81 | 33.97 | | 26.90 | 120 | 0.76 |
| | | | | 500 | 4.36 | 34.05 | | 27.02 | 110 | 0.88 |
| | | | | 600 | 4.01 | 34.13 | | 27.12 | 101 | 0.98 |
| | | | | 700 | 3.77 | 34.21 | | 27.20 | 93 | 1.08 |
| | | | | 800 | 3.63 | 34.27 | | 27.27 | 88 | 1.17 |
| 187 | BROWN BEAR; August 28, 1952; 0552 GCT; 46°53'N, 130°35'W; sounding, 1600 fm; wind, 220°, 6 kt; weather, cloudy; wire angle, 03°. | | | | | | | | | |
| 0 | 15.54 | 32.63 | | 0 | 15.54 | 32.63 | | 24.05 | 387 | 0.00 |
| 5 | 15.33 | 32.63 | | 10 | 15.43 | 32.64 | | 24.08 | 384 | 0.04 |
| 10 | 15.43 | 32.64 | | 20 | 15.14 | 32.63 | | 24.14 | 379 | 0.08 |
| 20 | 15.14 | 32.63 | | 30 | 14.97 | 32.63 | | 24.17 | 376 | 0.12 |
| 30 | 14.97 | 32.63 | | 50 | 8.18 | 32.74 | | 25.50 | 250 | 0.18 |
| 50 | 8.18 | 32.74 | | 75 | 7.59 | 32.70 | | 25.55 | 245 | 0.24 |
| 100 | 7.11 | 32.74 | | 100 | 7.11 | 32.74 | | 25.65 | 236 | 0.30 |
| 200 | 6.40 | 33.78 | | 150 | 6.80 | 33.38 | | 26.19 | 185 | 0.40 |
| 299 | 5.31 | 33.89 | | 200 | 6.40 | 33.78 | | 26.56 | 151 | 0.49 |
| 498 | 4.25 | 34.09 | | 250 | 5.80 | 33.84 | | 26.68 | 140 | 0.56 |
| 747 | 3.86 | 34.27 | | 300 | 5.30 | 33.89 | | 26.78 | 131 | 0.63 |
| 997 | 3.35 | - | | 400 | 4.69 | 34.00 | | 26.94 | 116 | 0.75 |
| | | | | 500 | 4.25 | | | | | |
| | | | | 600 | 4.10 | | | | | |
| | | | | 700 | 3.94 | | | | | |
| | | | | 800 | 3.76 | | | | | |

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | m | °C | ‰ | ml/L | g/L | $10^{-5}$ $cm^3/g$ | dyn. m |
| BROWN BEAR; August 28, 1952; 0849 GCT; 46°39'N, 130°35'W; sounding, 1180 fm; wind, 290°, 8 kt; weather, fog; wire angle, 12°. | | | | | | | | | | 188 |
| 0 | 15.76 | 32.77 | | 0 | 15.76 | 32.77 | | 24.11 | 382 | 0.00 |
| 5 | 15.22 | 32.77 | | 10 | 15.58 | 32.77 | | 24.15 | 378 | 0.04 |
| 10 | 15.58 | 32.77 | | 20 | 15.42 | 32.77 | | 24.18 | 375 | 0.08 |
| 20 | 15.42 | 32.77 | | 30 | 15.40 | 32.76 | | 24.18 | 376 | 0.11 |
| 30 | 15.40 | 32.76 | | 50 | 9.32 | 32.77 | | 25.34 | 265 | 0.18 |
| 49 | 9.36 | 32.77 | | 75 | 8.38 | 32.77 | | 25.49 | 251 | 0.24 |
| 98 | 7.70 | 32.83 | | 100 | 7.68 | 32.86 | | 25.66 | 235 | 0.30 |
| 196 | 6.80 | 33.77 | | 150 | 7.22 | 33.43 | | 26.17 | 187 | 0.41 |
| 294 | - | 33.86 | | 200 | | 33.77 | | | | |
| 495 | 4.33 | 34.04 | | 250 | | 33.82 | | | | |
| 742 | - | 34.25 | | 300 | 5.78 | 33.87 | | 26.71 | 138 | |
| 990 | 3.44 | 34.38 | | 400 | 4.96 | 33.96 | | 26.88 | 122 | |
| | | | | 500 | | 34.04 | | | | |
| | | | | 600 | | 34.14 | | | | |
| | | | | 700 | | 34.22 | | | | |
| | | | | 800 | | 34.29 | | | | |
| BROWN BEAR; August 28, 1952; 1127 GCT; 46°39'N, 130°57'W; sounding, 1260 fm; wind, 290°, 8 kt; weather, cloudy; wire angle, 14°. | | | | | | | | | | 189 |
| 0 | 15.46 | 32.67 | | 0 | 15.46 | 32.67 | | 24.10 | 382 | 0.00 |
| 5 | 15.41 | 32.69 | | 10 | 15.36 | 32.67 | | 24.12 | 381 | 0.04 |
| 10 | 15.36 | 32.67 | | 20 | 15.19 | 32.68 | | 24.17 | 377 | 0.08 |
| 20 | 15.19 | 32.68 | | 30 | 15.16 | 32.70 | | 24.19 | 375 | 0.11 |
| 30 | 15.16 | 32.70 | | 50 | 8.80 | 32.75 | | 25.41 | 258 | 0.18 |
| 49 | 8.83 | 32.75 | | 75 | 8.03 | 32.73 | | 25.51 | 249 | 0.24 |
| 98 | 7.46 | 32.78 | | 100 | 7.44 | 32.81 | | 25.66 | 236 | 0.30 |
| 195 | 6.50 | 33.79 | | 150 | 6.93 | 33.43 | | 26.21 | 183 | 0.41 |
| 293 | - | 33.93 | | 200 | 6.45 | 33.80 | | 26.57 | 150 | 0.49 |
| 493 | 4.32 | 34.07 | | 250 | 5.97 | 33.87 | | 26.69 | 140 | 0.56 |
| 741 | 3.83 | 34.28 | | 300 | 5.53 | 33.93 | | 26.79 | 130 | 0.63 |
| 990 | 3.37 | 34.39 | | 400 | 4.81 | 34.00 | | 26.93 | 118 | 0.75 |
| | | | | 500 | 4.31 | 34.08 | | 27.04 | 107 | 0.86 |
| | | | | 600 | 4.10 | 34.17 | | 27.14 | 99 | 0.97 |
| | | | | 700 | 3.91 | 34.25 | | 27.22 | 92 | 1.06 |
| | | | | 800 | 3.72 | 34.32 | | 27.30 | 85 | 1.15 |
| BROWN BEAR; August 28, 1952; 1407 GCT; 46°53'N, 130°57'W; sounding, 1420 fm; wind, 290°, 7 kt; weather, cloudy; wire angle, 10°. | | | | | | | | | | 190 |
| 0 | 15.40 | 32.66 | | 0 | 15.40 | 32.66 | | 24.10 | 382 | 0.00 |
| 5 | 15.39 | 32.68 | | 10 | 15.30 | 32.64 | | 24.11 | 382 | 0.04 |
| 10 | 15.30 | 32.64 | | 20 | 15.08 | 32.65 | | 24.17 | 377 | 0.08 |
| 20 | 15.08 | 32.65 | | 30 | 15.02 | 32.65 | | 24.18 | 376 | 0.11 |
| 30 | 15.02 | 32.65 | | 50 | 8.45 | 32.76 | | 25.47 | 253 | 0.18 |
| 50 | 8.45 | 32.76 | | 75 | 7.73 | 32.69 | | 25.52 | 248 | 0.24 |
| 98 | 7.20 | 32.72 | | 100 | 7.19 | 32.75 | | 25.64 | 237 | 0.30 |
| 197 | 6.42 | 33.78 | | 150 | 6.83 | 33.40 | | 26.20 | 184 | 0.41 |
| 295 | 5.31 | 33.88 | | 200 | 6.38 | 33.78 | | 26.56 | 151 | 0.49 |
| 493 | 4.38 | 34.05 | | 250 | 5.77 | 33.84 | | 26.69 | 139 | 0.56 |
| 740 | 3.82 | 34.23 | | 300 | 5.28 | 33.88 | | 26.78 | 131 | 0.63 |
| 988 | 3.31 | 34.37 | | 400 | 4.76 | 33.97 | | 26.91 | 119 | 0.76 |
| | | | | 500 | 4.36 | 34.06 | | 27.02 | 109 | 0.87 |
| | | | | 600 | 4.13 | 34.13 | | 27.10 | 102 | 0.98 |
| | | | | 700 | 3.91 | 34.20 | | 27.18 | 95 | 1.08 |
| | | | | 800 | 3.69 | 34.27 | | 27.26 | 89 | 1.17 |

UW

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| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm$^3$/g | dyn. m |
| **191** | BROWN BEAR; August 28, 1952; 2017 GCT; 46°29'N, 129°59'W; sounding, 1490 fm; wind, 320°, 8 kt; weather, slight drizzle; wire angle, 10°, 08°. | | | | | | | | | |
| 0 | 15.81 | 32.65 | 5.78 | 0 | 15.81 | 32.65 | 5.78 | 24.01 | 391 | 0.00 |
| 5 | 15.76 | 32.66 | 5.94 | 10 | 15.66 | 32.66 | 5.87 | 24.05 | 388 | 0.04 |
| 10 | 15.66 | 32.66 | 5.87 | 20 | 15.30 | 32.65 | 5.88 | 24.12 | 381 | 0.08 |
| 20 | 15.30 | 32.65 | 5.88 | 30 | 15.24 | 32.69 | 5.88 | 24.16 | 377 | 0.12 |
| 30 | 15.24 | 32.69 | 5.88 | 50 | 10.45 | 32.71 | 6.91 | 25.11 | 287 | 0.18 |
| 49 | 10.52 | 32.71 | 6.93 | 75 | 8.88 | 32.71 | 6.37 | 25.37 | 263 | 0.25 |
| 98 | 7.78 | 32.79 | 5.90 | 100 | 7.76 | 32.82 | 5.87 | 25.62 | 239 | 0.31 |
| 193 | 6.72 | 33.83 | 4.21 | 150 | 7.17 | 33.48 | 4.97 | 26.22 | 183 | 0.42 |
| 290 | - | 33.90 | 2.55 | 200 | 6.66 | 33.83 | 4.08 | 26.57 | 151 | 0.50 |
| | | | | 250 | 6.26 | 33.87 | 3.17 | 26.65 | 143 | 0.58 |
| 496a) | 4.73 | 34.07 | 0.76 | 300 | 5.89 | 33.91 | 2.44 | 26.73 | 136 | 0.65 |
| 744 | 3.94 | 34.25 | 0.31 | 400 | 5.24 | 33.99 | 1.43 | 26.87 | 124 | 0.78 |
| 992 | 3.38 | 34.39 | 0.28 | 500 | 4.72 | 34.07 | 0.75 | 26.99 | 112 | 0.89 |
| 1490 | 2.53 | 34.49 | 0.73 | 600 | 4.37 | 34.15 | 0.53 | 27.09 | 104 | 1.00 |
| 1988 | 1.99 | 34.61 | 1.43 | 700 | 4.06 | 34.22 | 0.36 | 27.18 | 96 | 1.10 |
| | | | | 800 | 3.81 | 34.29 | 0.29 | 27.26 | 88 | 1.19 |
| | | | | 1000 | 3.36 | 34.39 | 0.28 | 27.39 | 77 | 1.36 |
| | | | | 1200 | 2.99 | 34.43 | 0.44 | 27.45 | 72 | 1.51 |
| | | | | 1500 | 2.52 | 34.49 | 0.74 | 27.54 | 64 | 1.71 |
| **192** | BROWN BEAR; August 29, 1952; 1453 GCT; 46°44'N, 126°45'W; sounding, 1420 fm; wind, 290°, 20 kt; weather, intermittent moderate rain; wire angle, 10°, 08°. | | | | | | | | | |
| 0 | 15.60 | 32.48 | 5.77 | 0 | 15.60 | 32.48 | 5.77 | 23.92 | 399 | 0.00 |
| 5 | 15.63 | 32.47 | 5.71 | 10 | 15.58 | 32.48 | 5.71 | 23.93 | 399 | 0.04 |
| 10 | 15.58 | 32.48 | 5.71 | 20 | 15.30 | 32.48 | 5.86 | 23.99 | 394 | 0.08 |
| 20 | 15.30 | 32.48 | 5.86 | 30 | 13.75 | 32.49 | 6.27 | 24.32 | 362 | 0.12 |
| 30 | 13.75 | 32.49 | 6.27 | 50 | 8.57 | 32.63 | 6.76 | 25.35 | 264 | 0.18 |
| 50 | 8.57 | 32.63 | 6.76 | 75 | 8.03 | 32.71 | 6.40 | 25.49 | 251 | 0.24 |
| 99 | 7.61 | 32.83 | 5.94 | 100 | 7.61 | 32.85 | 5.89 | 25.66 | 235 | 0.31 |
| 198 | 7.00 | 33.87 | 2.89 | 150 | 7.35 | 33.48 | 4.11 | 26.20 | 185 | 0.41 |
| 297 | 5.94 | 33.98 | 1.94 | 200 | 6.97 | 33.87 | 2.87 | 26.55 | 152 | 0.50 |
| | | | | 250 | 6.39 | 33.93 | 2.35 | 26.68 | 140 | 0.57 |
| 496a) | 5.06 | 34.12 | 0.91 | 300 | 5.93 | 33.98 | 1.92 | 26.78 | 132 | 0.64 |
| 745 | 4.24 | 34.28 | 0.25 | 400 | 5.46 | 34.05 | 1.34 | 26.89 | 122 | 0.76 |
| 994 | 3.50 | 34.41 | 0.34 | 500 | 5.05 | 34.12 | 0.90 | 26.99 | 113 | 0.88 |
| 1492 | 2.56 | 34.56 | 0.81 | 600 | 4.71 | 34.19 | 0.54 | 27.09 | 104 | 0.99 |
| 1991 | 1.94 | 34.60 | 1.47 | 700 | 4.38 | 34.25 | 0.31 | 27.17 | 97 | 1.09 |
| | | | | 800 | 4.06 | 34.31 | 0.26 | 27.25 | 90 | 1.18 |
| | | | | 1000 | 3.49 | 34.41 | 0.34 | 27.39 | 77 | 1.35 |
| | | | | 1200 | 3.07 | 34.49 | 0.50 | 27.49 | 68 | 1.50 |
| | | | | 1500 | 2.55 | 34.56 | 0.82 | 27.60 | 59 | 1.69 |
| **193** | BROWN BEAR; August 29, 1952; 2150 GCT; 46°45'N, 125°40'W; sounding, 1010 fm; wind, 340°, 10 kt; weather, cloudy; wire angle, 10°, 05°. | | | | | | | | | |
| 0 | - | 32.20 | | 0 | | 32.20 | | | | |
| 5 | 15.60 | 32.22 | | 10 | 15.50 | 32.23 | | 23.75 | 416 | |
| 10 | 15.50 | 32.23 | | 20 | 12.98 | 32.36 | | 24.38 | 357 | |
| 20 | 12.98 | 32.36 | | 30 | 9.92 | 32.58 | | 25.10 | 288 | |
| 30 | 9.92 | 32.58 | | 50 | 7.94 | 32.64 | | 25.45 | 254 | |
| 50 | 7.94 | 32.64 | | 75 | 7.63 | 32.95 | | 25.74 | 227 | |
| 99 | 7.38 | 33.22 | | 100 | 7.37 | 33.23 | | 26.00 | 203 | |
| 198 | 6.73 | 33.94 | | 150 | 7.06 | 33.67 | | 26.39 | 167 | |
| 298 | 5.93 | 34.02 | | 200 | 6.71 | 33.94 | | 26.65 | 143 | |
| | | | | 250 | 6.29 | 33.98 | | 26.73 | 136 | |
| 498a) | 4.97 | 34.17 | | 300 | 5.92 | 34.02 | | 26.81 | 128 | |
| 748 | 4.15 | 34.30 | | 400 | 5.41 | 34.10 | | 26.94 | 117 | |
| 997 | 3.39 | 34.45 | | 500 | 4.96 | 34.17 | | 27.04 | 108 | |
| 1399 | 2.74 | 34.54 | | 600 | 4.63 | 34.22 | | 27.12 | 101 | |
| 1798 | 2.24 | 34.59 | | 700 | 4.30 | 34.27 | | 27.20 | 95 | |
| | | | | 800 | 3.97 | 34.34 | | 27.29 | 87 | |
| | | | | 1000 | 3.38 | 34.45 | | 27.43 | 73 | |
| | | | | 1200 | 3.04 | 34.50 | | 27.50 | 67 | |
| | | | | 1500 | 2.60 | 34.56 | | 27.59 | 59 | |

a) First cast.

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ $10^{-5}$ $cm^3/g$ | ΔD dyn. m |
| BROWN BEAR; August 30, 1952; 0257 GCT; 46°44'N, 125°04'W; sounding, 400 fm; wind, 340°, 10 kt; weather, overcast; wire angle, 16°. | | | | | | | | | | 194 |
| 0 | 16.24 | 32.18 | 4.91 | 0 | 16.24 | 32.18 | 4.91 | 23.55 | 435 | 0.00 |
| 5 | 16.22 | 32.19 | 5.56 | 10 | 16.20 | 32.17 | 5.54 | 23.55 | 435 | 0.04 |
| 10 | 16.20 | 32.17 | 5.54 | 20 | 15.83 | 32.19 | 5.54 | 23.65 | 426 | 0.09 |
| 20 | 15.83 | 32.19 | 5.54 | 30 | 10.16 | 32.40 | 6.25 | 24.92 | 305 | 0.12 |
| 29 | 10.32 | 32.39 | 6.27 | 50 | 7.96 | 32.62 | 5.76 | 25.43 | 256 | 0.18 |
| 48 | 8.04 | 32.60 | 5.82 | 75 | 7.44 | 32.96 | 4.80 | 25.78 | 224 | 0.24 |
| 72 | 7.41 | 32.90 | 4.96 | 100 | 7.53 | 33.39 | 3.76 | 26.10 | 194 | 0.29 |
| 96 | 7.56 | 33.36 | 3.83 | 150 | 7.11 | 33.73 | 2.96 | 26.43 | 163 | 0.38 |
| 193 | 6.77 | 33.92 | 2.40 | 200 | 6.71 | 33.93 | 2.33 | 26.64 | 144 | 0.46 |
| 289 | 6.03 | 34.00 | 1.61 | 250 | 6.31 | 33.97 | 1.89 | 26.72 | 136 | 0.53 |
| 482 | 5.14 | 34.14 | 0.86 | 300 | 5.98 | 34.01 | 1.56 | 26.80 | 130 | 0.60 |
| 674 | 4.30 | 34.23 | 0.43 | 400 | 5.51 | 34.09 | 1.14 | 26.92 | 119 | 0.72 |
| | | | | 500 | 5.06 | 34.15 | 0.81 | 27.02 | 111 | 0.84 |
| | | | | 600 | 4.62 | 34.20 | 0.56 | 27.11 | 103 | 0.94 |
| BROWN BEAR; August 30, 1952; 0521 GCT; 46°45'N, 124°47'W; sounding, 105 fm; wind, 340°, 7 kt; weather, overcast; wire angle, 10°. | | | | | | | | | | 195 |
| 0 | 15.67 | 31.70 | 6.05 | 0 | 15.67 | 31.70 | 6.05 | 23.31 | 458 | 0.00 |
| 5 | 15.39 | 32.09 | 5.98 | 10 | 15.28 | 32.19 | 5.96 | 23.77 | 414 | 0.04 |
| 10 | 15.28 | 32.19 | 5.96 | 20 | 11.22 | 32.42 | 6.50 | 24.75 | 321 | 0.08 |
| 20 | 11.22 | 32.42 | 6.50 | 30 | 8.80 | 32.50 | 6.26 | 25.22 | 277 | 0.11 |
| 30 | 8.80 | 32.50 | 6.26 | 50 | 7.82 | 32.78 | 5.56 | 25.58 | 242 | 0.16 |
| 40 | 8.23 | 32.59 | 6.12 | 75 | 7.47 | 33.28 | 4.39 | 26.02 | 201 | 0.22 |
| 59 | 7.58 | 32.95 | 5.10 | 100 | 7.37 | 33.61 | 3.37 | 26.30 | 175 | 0.26 |
| 78 | 7.46 | 33.33 | 4.27 | 150 | 6.96 | 33.88 | 1.57 | 26.56 | 150 | 0.35 |
| 98 | 7.40 | 33.59 | 3.52 | | | | | | | |
| 118 | 7.14 | 33.77 | 2.34 | | | | | | | |
| 148 | 6.97 | 33.88 | 1.59 | | | | | | | |
| 178 | 6.72 | 33.92 | 1.58 | | | | | | | |
| BROWN BEAR; August 30, 1952; 0746 GCT; 46°45'N, 124°30'W; sounding, 51 fm; wind, 070°, 6 kt; weather, intermittent moderate drizzle; wire angle, 10°. | | | | | | | | | | 196 |
| 0 | 15.46 | 30.93 | 5.88 | 0 | 15.46 | 30.93 | 5.88 | 22.76 | 510 | 0.00 |
| 5 | 15.06 | 31.09 | 6.50 | 10 | 14.18 | 31.96 | 6.52 | 23.83 | 409 | 0.05 |
| 10 | 14.18 | 31.96 | 6.52 | 20 | 9.88 | 32.52 | 6.00 | 25.06 | 291 | 0.08 |
| 20 | 9.88 | 32.52 | 6.00 | 30 | 7.37 | 32.87 | 4.84 | 25.71 | 229 | 0.11 |
| 30 | 7.37 | 32.87 | 4.84 | 50 | 7.12 | 33.41 | 2.88 | 26.17 | 186 | 0.15 |
| 40 | 7.13 | 33.18 | 4.07 | 75 | 7.09 | 33.82 | 1.50 | 26.50 | 155 | 0.19 |
| 60 | 7.11 | 33.60 | 2.05 | | | | | | | |
| 79 | 7.08 | 33.86 | 1.50 | | | | | | | |
| BROWN BEAR; August 31, 1952; 2023 GCT; 45°30'N, 124°06'W; sounding, 50 fm; wind, 340°, 8 kt; weather, cloudy; wire angle, 11°. | | | | | | | | | | 197 |
| 0 | 14.00 | 32.01 | 6.46 | 0 | 14.00 | 32.01 | 6.46 | 23.90 | 401 | 0.00 |
| 5 | 12.62 | 32.08 | 6.38 | 10 | 8.60 | 32.65 | 5.11 | 25.36 | 262 | 0.03 |
| 10 | 8.60 | 32.65 | 5.11 | 20 | 7.27 | 33.01 | 4.10 | 25.84 | 217 | 0.06 |
| 20 | 7.27 | 33.01 | 4.10 | 30 | 7.33 | 33.21 | 3.93 | 25.99 | 203 | 0.08 |
| 30 | 7.33 | 33.21 | 3.93 | 50 | 7.32 | 33.58 | 2.95 | 26.28 | 176 | 0.12 |
| 40 | 7.29 | 33.38 | 3.89 | 75 | 7.33 | 33.82 | 1.93 | 26.47 | 159 | 0.16 |
| 60 | 7.34 | 33.72 | 2.31 | | | | | | | |
| 80 | 7.32 | 33.82 | 1.96 | | | | | | | |

UW

BB-9

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm$^3$/g | dyn. m |

198 BROWN BEAR; August 31, 1952; 2214 GCT; 45°30'N, 124°25'W; sounding, 100 fm; wind, 340°, 8 kt; weather, cloudy; wire angle, 14°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.73 | 31.17 | 6.12 | 0 | 15.73 | 31.17 | 6.12 | 22.89 | 498 | 0.00 |
| 5 | 15.22 | 31.56 | 6.29 | 10 | 14.20 | 32.27 | 6.27 | 24.06 | 386 | 0.04 |
| 10 | 14.20 | 32.27 | 6.27 | 20 | 8.74 | 32.56 | 6.20 | 25.27 | 271 | 0.08 |
| 20 | 8.74 | 32.56 | 6.20 | 30 | 7.98 | 32.66 | 6.23 | 25.46 | 253 | 0.10 |
| 30 | 7.98 | 32.66 | 6.23 | 50 | 7.61 | 33.09 | 5.15 | 25.85 | 216 | 0.15 |
| 40 | - | 32.73 | 5.85 | 75 | 7.52 | 33.36 | 3.86 | 26.08 | 195 | 0.20 |
| 59 | 7.52 | 33.30 | 4.61 | 100 | 7.36 | 33.33 | 2.79 | 26.08 | 196 | 0.25 |
| 79 | 7.51 | 33.36 | 3.67 | 150 | 7.06 | 33.95 | 1.93 | 26.61 | 146 | 0.34 |
| 98 | 7.37 | 33.25 | 2.81 | | | | | | | |
| 118 | 7.26 | 33.84 | 2.52 | | | | | | | |
| 147 | - | 33.94 | 1.97 | | | | | | | |
| 176 | 6.88 | 33.95 | 1.62 | | | | | | | |

199 BROWN BEAR; September 1, 1952; 0130 GCT; 45°30'N, 124°50'W; sounding, 500 fm; wind, 320°, 10 kt; weather, cloudy; wire angle, 30°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.21 | 28.50 | - | 0 | 16.21 | 28.50 | | 20.74 | 704 | 0.00 |
| 5 | 16.10 | 29.25 | 6.17 | 10 | 15.92 | 31.51 | 5.87 | 23.11 | 477 | 0.06 |
| 10 | 15.92 | 31.51 | 5.87 | 20 | 14.47 | 32.35 | 6.54 | 24.07 | 386 | 0.10 |
| 19 | 15.72 | 32.32 | 5.88 | 30 | 10.72 | 32.53 | 6.89 | 24.92 | 304 | 0.14 |
| 21 | 13.32 | 32.38 | 7.13 | 50 | 8.40 | 32.65 | 6.51 | 25.39 | 260 | 0.19 |
| 37 | 9.30 | 32.61 | 6.73 | 75 | 7.66 | 32.66 | 6.27 | 25.51 | 249 | 0.26 |
| 56 | 8.10 | 32.66 | 6.43 | 100 | 7.29 | 32.80 | 5.71 | 25.67 | 234 | 0.32 |
| 75 | 7.66 | 32.66 | 6.27 | 150 | 7.29 | 33.56 | 3.42 | 26.27 | 178 | 0.42 |
| 157 | 7.37 | 33.72 | 2.97 | | | | | | | |

200 BROWN BEAR; September 1, 1952; 0428 GCT; 45°30'N, 125°20'W; sounding, 1000 fm; wind, 360°, 13 kt; weather, cloudy; wire angle, 20°, 19°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.08 | 32.08 | 5.78 | 0 | 16.08 | 32.08 | 5.78 | 23.51 | 439 | 0.00 |
| 5 | 16.06 | 32.07 | 5.81 | 10 | 16.14 | 32.21 | 5.76 | 23.60 | 431 | 0.04 |
| 10 | 16.14 | 32.21 | 5.76 | 20 | 15.42 | 32.35 | 6.12 | 23.86 | 406 | 0.08 |
| 20 | 15.42 | 32.35 | 6.12 | 30 | 10.13 | 32.58 | 7.31 | 25.06 | 291 | 0.12 |
| 29 | 10.24 | 32.58 | 7.36 | 50 | 8.42 | 32.63 | 6.57 | 25.37 | 262 | 0.18 |
| 48 | 8.46 | 32.62 | 6.62 | 75 | 7.98 | 32.81 | 5.96 | 25.58 | 243 | 0.24 |
| 96 | 7.68 | 32.97 | 5.41 | 100 | 7.67 | 33.02 | 5.25 | 25.79 | 223 | 0.30 |
| 193 | 7.24 | 33.88 | 2.55 | 150 | 7.51 | 33.57 | 3.54 | 26.24 | 181 | 0.40 |
| 292 | 6.20 | 33.99 | 1.96 | 200 | 7.15 | 33.89 | 2.51 | 26.55 | 153 | 0.48 |
| | | | | 250 | 6.59 | 33.95 | 2.21 | 26.67 | 142 | 0.55 |
| 487a) | 5.33 | 34.08 | 0.90 | 300 | 6.16 | 33.99 | 1.90 | 26.76 | 134 | 0.62 |
| 732 | 4.35 | 34.25 | 0.39 | 400 | 5.71 | 34.03 | 1.30 | 26.84 | 126 | 0.75 |
| 979 | 3.71 | 34.38 | 0.39 | 500 | 5.27 | 34.09 | 0.85 | 26.94 | 118 | 0.88 |
| 1374 | 2.90 | 34.49 | 0.69 | 600 | 4.84 | 34.16 | 0.60 | 27.05 | 108 | 0.99 |
| 1771 | - | 34.55 | 1.36 | 700 | 4.46 | 34.23 | 0.43 | 27.15 | 100 | 1.09 |
| | | | | 800 | 4.16 | 34.29 | 0.38 | 27.23 | 92 | 1.19 |
| | | | | 1000 | | 34.39 | 0.40 | | | |
| | | | | 1200 | | 34.45 | 0.52 | | | |
| | | | | 1500 | | 34.51 | 0.86 | | | |

a) First cast.

| OBSERVED | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ $10^{-5}$ $cm^3/g$ | ΔD dyn. m | |
| BROWN BEAR; September 1, 1952; 1752 GCT; 45°33'N, 127°09'W; sounding, 1550 fm; wind, 360°, 17 kt; weather, partly cloudy; wire angle, 17°, 15°. | | | | | | | | | | | 201 |
| 0 | 15.98 | 32.14 | 5.77 | 0 | 15.98 | 32.14 | 5.77 | 23.58 | 432 | 0.00 | |
| 5 | 15.97 | 32.15 | 5.92 | 10 | 15.96 | 32.18 | 5.80 | 23.61 | 429 | 0.04 | |
| 10 | 15.96 | 32.18 | 5.80 | 20 | 15.96 | 32.20 | 5.80 | 23.63 | 428 | 0.09 | |
| 20 | 15.96 | 32.20 | 5.80 | 30 | 10.86 | 32.39 | 7.12 | 24.79 | 317 | 0.12 | |
| 29 | 11.00 | 32.38 | 7.17 | 50 | 8.65 | 32.60 | 6.25 | 25.32 | 267 | 0.18 | |
| 49 | 8.68 | 32.59 | 6.27 | 75 | 7.95 | 32.92 | 5.56 | 25.67 | 234 | 0.24 | |
| 98 | 7.46 | 33.18 | 4.93 | 100 | 7.45 | 33.20 | 4.86 | 25.96 | 207 | 0.30 | |
| 197 | 6.97 | 33.93 | 2.32 | 150 | 7.25 | 33.65 | 3.33 | 26.34 | 171 | 0.39 | |
| 296 | 6.10 | 34.03 | 1.53 | 200 | 6.94 | 33.93 | 2.30 | 26.61 | 147 | 0.47 | |
| | | | | 250 | 6.47 | 33.99 | 1.87 | 26.72 | 137 | 0.54 | |
| 484a) | 5.17 | 34.15 | 0.73 | 300 | 6.08 | 34.03 | 1.51 | 26.80 | 130 | 0.61 | |
| 974 | 3.60 | 34.40 | 0.32 | 400 | 5.56 | 34.10 | 1.04 | 26.92 | 119 | 0.74 | |
| 1470 | 2.65 | 34.54 | 1.30 | 500 | 5.11 | 34.16 | 0.69 | 27.02 | 110 | 0.85 | |
| 1968 | 1.97 | 34.59 | 1.49 | 600 | 4.74 | 34.22 | 0.52 | 27.11 | 103 | 0.96 | |
| | | | | 700 | 4.40 | 34.27 | 0.38 | 27.19 | 96 | 1.06 | |
| | | | | 800 | 4.09 | 34.32 | 0.31 | 27.26 | 89 | 1.15 | |
| | | | | 1000 | 3.54 | 34.41 | 0.39 | 27.39 | 78 | 1.32 | |
| | | | | 1200 | 3.13 | 34.47 | 0.86 | 27.47 | 70 | 1.46 | |
| | | | | 1500 | 2.60 | 34.55 | 1.33 | 27.58 | 60 | 1.66 | |
| BROWN BEAR; September 2, 1952; 0628 GCT; 45°33'N, 129°02'W; sounding, 1465 fm; wind, 360°, 18 kt; weather, cloudy; wire angle, 18°, 15°. | | | | | | | | | | | 202 |
| 0 | 16.75 | 31.98 | 5.66 | 0 | 16.75 | 31.98 | 5.66 | 23.28 | 461 | 0.00 | |
| 5 | 16.72 | 31.96 | 5.73 | 10 | 16.72 | 31.98 | 5.63 | 23.29 | 460 | 0.05 | |
| 10 | 16.72 | 31.98 | 5.63 | 20 | 16.70 | 31.98 | 5.70 | 23.29 | 460 | 0.09 | |
| 20 | 16.70 | 31.98 | 5.70 | 30 | 15.57 | 32.27 | 5.95 | 23.77 | 415 | 0.14 | |
| 29 | 15.94 | 32.24 | 5.87 | 50 | 9.93 | 32.66 | 7.04 | 25.16 | 282 | 0.21 | |
| 49 | 9.99 | 32.66 | 7.06 | 75 | 8.65 | 32.69 | 6.71 | 25.39 | 261 | 0.27 | |
| 99 | 7.69 | 32.78 | 6.27 | 100 | 7.68 | 32.80 | 6.23 | 25.62 | 240 | 0.34 | |
| 196 | 6.51 | 33.85 | 3.42 | 150 | 7.04 | 33.47 | 4.52 | 26.23 | 182 | 0.44 | |
| 295 | 5.58 | 33.92 | 2.54 | 200 | 6.47 | 33.85 | 3.38 | 26.61 | 147 | 0.52 | |
| | | | | 250 | 5.97 | 33.89 | 2.93 | 26.70 | 138 | 0.60 | |
| 496a) | 4.54 | 34.09 | 1.00 | 300 | 5.55 | 33.92 | 2.50 | 26.78 | 131 | 0.66 | |
| 746 | 4.03 | 34.31 | 0.29 | 400 | 4.97 | 34.01 | 1.62 | 26.92 | 119 | 0.79 | |
| 996 | 3.35 | 34.42 | 0.30 | 500 | 4.53 | 34.09 | 0.97 | 27.03 | 109 | 0.90 | |
| 1494 | 2.46 | 34.52 | 0.84 | 600 | 4.35 | 34.19 | 0.62 | 27.13 | 100 | 1.01 | |
| 1993 | - | 34.60 | 1.59 | 700 | 4.14 | 34.28 | 0.37 | 27.22 | 92 | 1.10 | |
| | | | | 800 | 3.87 | 34.34 | 0.28 | 27.30 | 85 | 1.19 | |
| | | | | 1000 | | 34.42 | 0.30 | | | | |
| | | | | 1200 | | 34.46 | 0.49 | | | | |
| | | | | 1500 | | 34.52 | 0.85 | | | | |
| BROWN BEAR; September 2, 1952; 1251 GCT; 45°41'N, 129°40'W; sounding, 1320 fm; wind, 360°, 18 kt; weather, clear; wire angle, 30°, 20°. | | | | | | | | | | | 203 |
| 0 | 15.95 | 32.34 | - | 0 | 15.95 | 32.34 | | 23.74 | 417 | 0.00 | |
| 5 | 16.10 | 32.36 | 5.80 | 10 | 15.96 | 32.35 | 5.84 | 23.74 | 417 | 0.04 | |
| 10 | 15.96 | 32.35 | 5.84 | 20 | 15.94 | 32.36 | 5.69 | 23.75 | 416 | 0.08 | |
| 20 | 15.94 | 32.36 | 5.69 | 30 | 15.18 | 32.62 | 6.17 | 24.12 | 381 | 0.12 | |
| 29 | 15.60 | 32.61 | 6.12 | 50 | 9.14 | 32.73 | 6.98 | 25.34 | 265 | 0.19 | |
| 48 | 9.23 | 32.74 | 6.98 | 75 | 8.13 | 32.70 | 6.82 | 25.47 | 253 | 0.25 | |
| 96 | 7.46 | 32.75 | 6.55 | 100 | 7.42 | 32.81 | 6.41 | 25.66 | 235 | 0.32 | |
| 194 | 6.51 | 33.82 | 3.66 | 150 | 6.93 | 33.46 | 4.77 | 26.24 | 181 | 0.42 | |
| 292 | 5.59 | 33.95 | 2.32 | 200 | 6.44 | 33.83 | 3.56 | 26.59 | 148 | 0.50 | |
| | | | | 250 | 5.94 | 33.90 | 2.83 | 26.71 | 137 | 0.57 | |
| 436a) | 4.88 | 34.05 | 1.21 | 300 | 5.55 | 33.96 | 2.24 | 26.81 | 128 | 0.64 | |
| 656 | 4.13 | 34.19 | 0.44 | 400 | 5.04 | 34.03 | 1.44 | 26.92 | 118 | 0.76 | |
| 877 | 3.50 | 34.34 | 0.31 | 500 | 4.65 | 34.09 | 0.92 | 27.02 | 110 | 0.88 | |
| 1336 | 2.73 | 34.48 | 0.59 | 600 | 4.31 | 34.15 | 0.57 | 27.10 | 103 | 0.98 | |
| | | | | 700 | 3.99 | 34.22 | 0.40 | 27.19 | 95 | 1.08 | |
| | | | | 800 | 3.70 | 34.29 | 0.34 | 27.27 | 87 | 1.17 | |
| | | | | 1000 | 3.22 | 34.40 | 0.31 | 27.41 | 75 | 1.33 | |
| | | | | 1200 | 2.88 | 34.46 | 0.44 | 27.49 | 68 | 1.48 | 617 |

a) First cast.

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